

MEETING AGENDA
 ENVIRONMENTAL PROTECTION COMMISSION
 WALLACE STATE OFFICE BUILDING
 DES MOINES, IOWA
 February 19-20, 1990

Senders Initials

JG.

Meeting convenes at 10:00 a.m., February 19, 1990 in the fourth floor conference room and reconvenes on February 20, 8:30 a.m.

Public Participation

3:00 p.m.

Break

3:30 p.m.

Appointments:

Fred Iben (A.G. Referral)

9:00 a.m. - Tues, Feb. 20
4:00 p.m.Meeting reconvenes 8:30 a.m., February 20

Appointments: City of Fairfield (A.G. Referral)
 Larry Mathern (" ")
 Waltermann Implement (" ")

Alfred Blackmer, ISU (Nitrogen testing kit)

9:15 a.m.
 9:30 a.m.
 9:45 a.m.
 10:00 a.m.

Break

Siouxland Quality Meef Co. (A.G. Referral)

10:30 a.m.
 10:45 a.m.

1. Approve Agenda
2. Approve Minutes of January 16-17, 1990.
3. Director's Report. (Wilson) Informational.
4. Risk Assessment Study. (Combs) Informational.
 - (a) Mr. John Eure, Iowa Department of Public Health
 - (b) Mr. Henry Anderson, Wisconsin Department of Public Health
5. Computer and Equipment Acquisition for Water and Air Programs. (Kuhn) Decision.
6. Financial Status Report. (Kuhn) Informational.
7. Landfill Alternative Grant Applications. (Hay) Informational.
8. Proposed Rule--Chapter 101 Revision, General Requirements Relating to Solid Waste Disposal. (Hay) Informational.
9. Grants to Composting Projects with Degradable Bags. (Hay) Decision.
10. Monthly Reports. (Stokes) Informational.
11. Feasibility Study for Improvements to the Public Water Supply System, Winterset, Iowa. (Stokes) Informational.
12. Final Rule--Chapter 39, Requirements for Properly Plugging Abandoned Wells. (Stokes) Decision.

13. Proposed Rule--Chapters 40, 41, and 43, Public Water Supply Monitoring and Surface Water Filtration and Disinfectant. (Stokes) Informational.
14. Notice of Intended Action--Chapter 23 Amendment, National Emission Standard for Air Pollutants, Asbestos Demolition and Renovation Operations. (Stokes) Decision.
15. Notice of Intended Action--Chapter 135 Amendment, Corrective Action Levels for Petroleum Contamination from Underground Storage Tank Installations. (Stokes) Decision.
16. Proposed Rule--Chapter 121 Amendment, Land Treatment procedures for Petroleum Contaminated Soils. (Stokes) Informational.
17. Proposed Rule--Chapter 109 Amendment, Solid Waste Disposal Fees. (Stokes) Informational.
- delete* - 18. ~~Proposed Rule--Chapters 100 and 102 Amendments, Sanitary Landfill Operator and Solid Waste Incinerator Operator Certification. (Stokes) Informational.~~
19. Proposed Contested Case Decision--East Side Acres. (Combs) Decision.
- 19A. *Proposed Contested Case Decision--Craig Natvig. (Combs) Decision.*
20. Appeal of Contested Case Decision--Charles Clapp. (Combs) Decision.
21. Referrals to the Attorney General. (Combs) Decision.
 - (a) Don Carolan/Hanson Tire Service (Ridgeway/Cresco)
 - (b) Waltermann Implement, Inc. (Dike)
 - delete* - (c) ~~Van Diest Supply Co. (Webster City)~~
 - (d) Mathern/Beck/Walker Oil Co. (Garwin)
 - (e) DeWitt Moose Lodge (DeWitt)
 - (f) Timber Lake Estates (Swisher)
 - (g) Darlo Schaap (Sioux Center)
 - (h) Siouxland Quality Meat Co. (Sioux City)
 - (i) City of Fairfield
22. Legislation Update. (Combs) Informational.
23. Fred Iben - Appointment/regarding Referral to A.G. in November 1989
24. General Discussion Items
25. Address Items for Next Meeting.

NEXT MEETING DATES

March 19-20, 1990
April 16-17, 1990
May 21-22, 1990

ENVIRONMENTAL PROTECTION COMMISSION

Monday, February 19, 1990

NAME

COMPANY OR AGENCY

CITY

(please print)

JOHN A. EURE

IODPH
DSM

Jane McAllister

Ahlens Law Firm

Dr Henry Anderson

Wisc Dept. of Health

Brad V. Cudal

Dept. of Health - Iowa

DSM

Jack E. Hawley

" " " "

"

Rita Hegely

" " " "

"

DAN VEST

GROW MARK, INC.

ELUOMINGTUN, IL.

Carol Rose

DM Registrar

Lee Fyett

Hygienic Lab

Des Moines

Ed Kistner

Petro Marketers
of Iowa

Des Moines

Dale A. Linn

Iowa Farm Bureau

W. D. M.

TED YAWERER

IFBF

WDM

JOHN FRIBBIE

IFBF

DES MOINES

Norm Balwanz

Superman

Hardin Co

ENVIRONMENTAL PROTECTION COMMISSION

Tuesday, February 20, 1990

NAME

COMPANY OR AGENCY

CITY

(please print)

Jane McAllister	Ahlers Law Firm	Des Moines
Ken DAVENPORT	UNIV. of Iowa Hosp. & Clinics	Iowa City
CHIP LOWE	ADAMS HOWE ZOSS	DES MOINES
FRED IBEN	SELF	MONTICELLO
RAID H BECK	SELF	GARWIN, IO.
Larry Mathem	Self	Garwin IA.
Dan Riney	City of Fairfield	Fairfield, IA.
John F. Brown	City of Fairfield	Fairfield, IA
MARTY MINER	H. D. GREEN CO	CEDAR RAPIDS, IA
Todd Geer	Kleibenstein Law Firm	Windsor
alfred M Blackmer	Iowa State Univ	AMES
JACK WAHKEO	WAHKEOIL CO.	TOLEDO, IA
Kathleen A. KRANTZ	SI 1412 SIOUXLAND QUALITY MEAT CO., INC.	Sioux City, Ia

CW

RECORD COPY *EPC Meeting*
File Name *ADM-1-1-1 Feb. 1990*
Senders Initials *JY.*

Minutes of the Environmental Protection Commission Meeting

February 19-20, 1990

Wallace State Office Building, Des Moines, Iowa

TABLE OF CONTENTS

FEBRUARY 1990 COMMISSION MEETING	E90Feb-1
MEMBERS PRESENT	E90Feb-1
ADOPTION OF AGENDA	E90Feb-1
ADOPTION OF MINUTES	E90Feb-2
DIRECTOR'S REPORT	E90Feb-2
STATEWIDE RURAL WELL-WATER SURVEY - DR. GEORGE HALLBERG	E90Feb-2
RISK ASSESSMENT STUDY	E90Feb-3
JOHN EURE - RISK ASSESSMENT STUDY	E90Feb-3
HENRY ANDERSON - RISK ASSESSMENT STUDY	E90Feb-4
COMPUTER AND EQUIPMENT ACQUISITION FOR WATER AND AIR PROGRAMS	E90Feb-4
FINANCIAL STATUS REPORT	E90Feb-7
MONTHLY REPORTS	E90Feb-13
LANDFILL ALTERNATIVE GRANT APPLICATIONS	E90Feb-22
PROPOSED RULE--CHAPTER 101 REVISION, GENERAL REQUIREMENTS RELATING TO SOLID WASTE DISPOSAL . .	E90Feb-33
GRANTS TO COMPOSTING PROJECTS WITH DEGRDABLE BAGS .	E90Feb-41
PUBLIC PARTICIPATION	E90Feb-50
FEASIBILITY STUDY FOR IMPROVEMENTS TO THE PUBLIC WATER SUPPLY SYSTEM, WINTERSET, IOWA	E90Feb-51
FINAL RULE--CHAPTER 39, REQUIREMENTS FOR PROPERLY PLUGGING ABANDONED WELLS	E90Feb-52

PROPOSED RULE--CHAPTERS 40, 41, AND 43, PUBLIC WATER SUPPLY MONITORING AND SURFACE WATER FILTRATION AND DISINFECTANT	E90Feb-74
NOTICE OF INTENDED ACTION--CHAPTER 23 AMENDMENT, NATIONAL EMISSION STANDARD FOR AIR POLLUTANTS, ASBESTOS DEMOLITION & RENOVATION	E90Feb-100
NOTICE OF INTENDED ACTION--CHAPTER 135 AMENDMENT, CORRECTIVE ACTION LEVELS FOR PETROLEUM CONTAMINATION FROM UST INSTALLATIONS	E90Feb-102
PROPOSED RULE--CHAPTER 121 AMENDMENT, LAND TREATMENT PROCEDURES FOR PETROLEUM CONTAMINATED SOILS . . .	E90Feb-111
PROPOSED RULE--CHAPTER 109 AMENDMENT, SOLID WASTE DISPOSAL FEES	E90Feb-115
PROPOSED CONTESTED CASE DECISION--EAST SIDE ACRES	E90Feb-119
PROPOSED CONTESTED CASE DECISION--CRAIG NATVIG . .	E90Feb-119
APPEAL OF CONTESTED CASE DECISION--CHARLES CLAPP	E90Feb-120
SOO LINE REFERRAL (removed from table in January)	E90Feb-121
REFERRALS TO THE ATTORNEY GENERAL	E90Feb-121
LEGISLATION UPDATE	E90Feb-123
TED YANACEK - FARM BUREAU	E90Feb-136
UPDATE - DON ERVIN	E90Feb-137
RECESS	E90Feb-137
MEETING RECONVENES 8:30 A.M., TUESDAY, FEBRUARY 20, 1990	E90Feb-137
BRIEFING, ON-SITE DISPOSAL OF FARM WASTE	E90Feb-137
APPOINTMENT - FRED IBEN (Referral to A.G. in November 1989)	E90Feb-138

APPOINTMENT - CHIP LOWE	E90Feb-138
APPOINTMENT - JOHN BROWN	E90Feb-140
APPOINTMENT - LARRY MATHERN	E90Feb-142
APPOINTMENT - JACK WALKER	E90Feb-143
APPOINTMENT - RALPH BECK	E90Feb-144
APPOINTMENT - TODD GEER	E90Feb-144
APPOINTMENT - KATHLEEN KRANTZ	E90Feb-145
APPOINTMENT - ALFRED BLACKMER, ISU (Nitrogen testing kit)	E90Feb-147
NEXT MEETING DATES	E90Feb-148
ADJOURNMENT	E90Feb-148
INDEX	E90Feb-149

FEBRUARY 1990 COMMISSION MEETING

The meeting of the Environmental Protection Commission was held in the Wallace State Office Building, Des Moines, Iowa, convening at 10:00 a.m. on February 19, 1990.

MEMBERS PRESENT

Mike Earley, William Ehm, Richard Hartsuck, Rozanne King, Charlotte Mohr, Margaret Prah, Gary Priebe, Nancy Lee Siebenmann, and Clark Yeager.

ADOPTION OF AGENDA

The following items were added to the agenda:

- Item 19A - Proposed Contested Case Decision--Craig Natvig
- Item 20A - Soo Line Referral (removed from table in January)

Motion was made by Nancy Lee Siebenmann to approve the addition of these items to the agenda. Seconded by Rozanne King. Motion carried unanimously.

Appointments to be added to the agenda:

Fred Iben originally scheduled for 4:00 p.m., Monday, February 19 was changed to 9:00 a.m., Tuesday, February 20
City of Fairfield (A.G. Referral) - 9:15 a.m., Tuesday, Feb. 20
Larry Mathern (A.G. Referral) - 9:30 a.m., Tuesday, February 20
Walterman Implement (A.G. Referral) - 9:45 a.m., Tuesday, February 20
Siouxland Quality Meat Co. (A.G. Referral) - 10:45 a.m., Tuesday, February 20

The following was deleted from the agenda:

Item #21 (c), Van Diest Supply Company

Motion was made by Nancy Lee Siebenmann to approve the agenda as amended. Seconded by William Ehm. Motion carried unanimously.

ADOPTION OF MINUTES

The following correction was made to the minutes of January 16-17, 1990:

Page 1, last sentence, the word "Sioux" should be changed to "Soo."

Motion was made by William Ehm to approve the minutes of January 16-17, 1990 as amended. Seconded by Mike Earley. Motion carried unanimously.

DIRECTOR'S REPORT

Larry Wilson, Director, reported that the February issue of the Iowa Conservationist contained a number of environmental related items which may be of interest to the Commission.

He reported that two of the REAP assemblies have taken place, the first being held in Oakland, Iowa on February 8 with 110 people in attendance. The second meeting was held in Maquoketa and there were 220 people in attendance. The meeting scheduled in Correctionville was cancelled due to the weather and has been rescheduled for March 29. He mentioned that there will be REAP meetings later in the week as follows: Tuesday night at Carroll; Wednesday night at Marshalltown; Thursday night at Creston; and Saturday at the Des Moines Botanical Center. All of the meetings are from 7:00 - 10:00 p.m., except the Des Moines meeting which will be held from 1:00 - 5:00 p.m.

Director Wilson introduced Dr. George Hallberg and stated that he will give a report on the Statewide Rural Well-Water Survey.

STATEWIDE RURAL WELL-WATER SURVEY - DR. GEORGE HALLBERG

Dr. George Hallberg, State Geologist, Geological Survey Bureau (Iowa City), presented a synopsis of the Iowa Statewide Rural Well-Water Survey. He stated that this study was jointly conducted by the DNR and the Center of Health Effects on Environmental Contamination at the University of Iowa. The study was an outgrowth of the Iowa Groundwater Act responsibilities to try to assess the quality of private drinking water supplies across the state.

Dr. Hallberg gave an in-depth report covering the following topics: Study questions, objectives, and design; sample point

locations; seasonal variability, regions and counties for quarterly repeat sampling; participation rates by rural Iowans (81%); laboratory measurements; laboratories performing measurements; drought effects; nitrate percentages found; rural population at risk for nitrate exposure (18%); pesticide percentages; extent of pesticide contamination; unsafe total coliform (44.6%); and perspectives.

Dr. Hallberg distributed copies of the report; a copy is on file in the department's Records Center.

Discussion followed regarding various topics of the report.

RISK ASSESSMENT STUDY

James Combs, Division Administrator, Coordination & Information Division, presented the following item.

Two public health officials will provide testimony. John Eure from the Iowa Department of Public Health will discuss risk assessment of toxic substances. He will be followed by Dr. Henry Anderson of the Wisconsin Department of Public Health. Dr. Anderson will discuss Wisconsin's risk assessment program.

Mr. Combs stated that this is the continuation of discussion which has been presented over the last several months regarding risk assessment. He reviewed the Commission has heard from industry representatives as well as U.S. EPA experts. Mr. Combs introduced John Eure of the Iowa Department of Public Health and Henry Anderson of the Wisconsin Department of Public Health.

JOHN EURE - RISK ASSESSMENT STUDY

John Eure, Assistant Director of Environmental Health Division in the Iowa Department of Public Health, explained that risk assessment is an attempt to predict levels of toxic materials at which no adverse effect to humans will occur, or at least the risk would be low enough to be acceptable. He further explained how predictions are achieved through the use of studies and events that have occurred in the past. He noted that a wealth of data was available on radiation because of the numerous events which occurred with radiation in the past. From a human standpoint, not as many events have occurred in relation to toxics, so most of these studies have come from animal studies. Mr. Eure related that this information has to be extrapolated to human beings because of differences in human bodies as compared to animals. Safety factors are applied using factors to allow for differences in individual makeup. He described various ways

chemicals affect individuals and discussed margin of safety ranges. When there is no threshold one has to set some risks, these generally range from 10^{-4} to 10^{-6} .

HENRY ANDERSON - RISK ASSESSMENT STUDY

Henry Anderson, Chief of Environmental and Chronic Disease Epidemiology Section in the Wisconsin Department of Public Health, distributed a copy of Wisconsin's groundwater standards program. He provided a history of their program and related that it is specifically designed to be a preventive or resource protection program. These standards follow a two tier approach with an enforcement standard and a preventive action limit developed for each regulated substance. He explained that the major problem in Wisconsin is the loss of property value one has when a well is contaminated. If a well is over the nitrate standard it is difficult to get a mortgage on a house. Mr. Anderson stated that there are many different ways to do risk assessment, but what has been done over the last decade is to use the modeling which is used by EPA. One of the major benefits of risk assessment is to allow one to compare risks. Mr. Anderson noted that in Wisconsin they have gone through three cycles of setting standards and have now established standards for 72 compounds. He pointed out that it does not appear that there will be a comprehensive federal groundwater standards protection program. He explained that from Wisconsin's groundwater standard, at least from the Health Department's view, they are not to have economics taken into account in setting these standards. Mr. Anderson stated that Wisconsin's enforcement standard allows the state to go in when a standard is exceeded and prohibit certain practices in the area where the contamination has occurred. Additionally, a percentage of that standard is the preventive action limit which is their alert sign.

Discussion followed.

Mr. Combs stated that next month a representative from U.S. EPA who dealt with Times Beach, Missouri will talk about the risk assessment process they went through at Times Beach, and why they made some of the decisions they made.

This was an informational item; no action was required.

COMPUTER AND EQUIPMENT ACQUISITION FOR WATER AND AIR PROGRAMS

Stan Kuhn, Division Administrator, Administrative Services Division, presented the following item.

The department requests approval to purchase the equipment listed below:

(1) Wastewater Permits (205g)

1	IBM PS/2 Model 55SX w/accessories	\$ 3,835
2	HP laser printer w/connections	3,973
	Software and 3270 program emulation	1,099
		\$ 8,907

This system will be used to transmit NPDS data to EPA, perform quality control checks and maintain several data-bases. The printers will replace dot matrix printers to produce NPDES permits, quarterly State/EPA Agreement reports and other miscellaneous reports and correspondence to become part of a network link.

This acquisition will be 100% federally-funded.

(2) Water Quality Planning (205j)

1	IBM PS/2 Model 55SX w/accessories	\$ 4,990
	Printer upgrade	1,255
	Software and 3270 emulation	2,360
		\$ 8,605

This system will be used for updating and utilizing STORET. Software packages are needed to provide compatibility with data systems within and outside the department. Printer upgrade will allow more data to be processed without delays.

This acquisition will be 100% federally-funded.

(3) Floodplain Management

2	IBM PS/2 Model 80 w/accessories	\$14,890
1	HP laser printer w/connections	2,383
	Software and 3270 program emulation	1,520
		\$18,793

This system will be used for hydrological and hydraulic models in reviewing permits. Not all programs are on the mainframe and software development in these and other related areas are based on PC applications.

This acquisition will be funded from the department's state appropriation.

(4) Water Supply

1	IBM PS/2 Model 55SX w/accessories	\$ 4,055
---	-----------------------------------	----------

Software and 3270 program emulation 1,125
\$ 5,180

This system will be used for on-line communication with the state mainframe, GSB information transfer and interdepartmental communications. Uses will include tracking, monitoring, reviewing and issuing permits. Not all programs are on the mainframe and publication and data transfer packages are available only for PC applications.

This acquisition will be 75% federally-funded and 25% from the department's state appropriation.

(5) Air Quality

1	IBM PS/2 Model 70 w/accessories (including Epson printer)	\$ 9,600
1	Ozone monitor	6,300
1	PM-10 sample head and flow controller	1,600
22	Odessa data logger upgrades	12,315
1	Bivane wind direction sensor	2,110
		\$32,925

The computer system will be used for enhanced modeling to allow the use of existing microcomputers for permit review to improve efficiency and quality. The other equipment will be used by UHL to provide a check of ozone equipment to correct a program audit deficiency and maintain the PM-1 network. Data logger upgrades have been requested by UHL and Polk County to support current software routines, provide more efficient remote zero and span management, and provide adequate backup at UHL sites with several monitors. The wind sensor will allow for the collection of on-site meteorological data at an additional monitoring station for more accurate determination of stability class information necessary for dispersion modeling assessments.

These equipment acquisitions will be 100% federally-funded as part of the program support grant.

Mr. Kuhn explained how the equipment is being purchased and the difference between equipment costs for each program.

Margaret Prahl commented that if the purchase is included in the budget, and there is a need for the equipment, it is not necessary to bring it before the Commission for their approval.

Mr. Kuhn explained that all equipment purchases have been brought before the Commission as a matter of continuation of a practice that existed prior to reorganization of state government.

Mike Earley related that as long as the purchase is incorporated in the Capital Expenditures at the beginning of the budget year there would not be a need to bring it before the Commission.

Motion was made by William Ehm to approve purchase of the Computer and Equipment Acquisition for the Water and Air Programs. Seconded by Clark Yeager. Motion carried unanimously.

ANNOUNCEMENT

Chairperson Mohr announced that Item #18, Proposed Rule--Chapters 100 and 102, will be deleted and it will be presented at the March meeting.

FINANCIAL STATUS REPORT

Stan Kuhn, Division Administrator, Administrative Services Division, presented the following item.

Attached is the Monthly Financial Status Report, by division, year-to-date to January 31st. Divisions are generally within their budgets, and there are no issues that have not been previously noted. The spending plan errors, with the exception of "personal travel" in the Parks, Preserves, and Recreation Division, have been corrected. The monthly bill for vehicle depreciation and vehicle operation is a monthly late, with the result that the report indicates these categories are more "under" budget than would otherwise be the case.

A brief analysis prepared for the Director is also attached. Staff will attempt to answer questions you may have, either beforehand, or at the meeting.

(Report is shown on the following 5 pages)

IOWA DEPARTMENT OF NATURAL RESOURCES

DATE: February 5, 1990
TO: Larry J. Wilson
FROM: Stan Kuhn *gck*
SUBJECT: Monthly Financial Status Report, 1/31/90.

Attached is the Monthly Financial Status Report, by division, year-to-date to January 31st. There are no issues that have not been previously noted. The spending plan errors noted last month have been corrected, with the exception of the "personal travel" budget in Parks, Preserves and Recreation which is still overstated by \$15,000. The monthly bill from the Vehicle Dispatcher is late again, resulting in the categories of "vehicle operation" and "vehicle depreciation" showing expenditures for six months, but the spending plan anticipating seven months.

Director's Office. Generally under budget. No issues noted.

Coordination and Information. Generally within budget. The Conservation Education Center is about \$16,000 over budget. Within the Planning Bureau \$28,500 in Groundwater Planning and \$15,000 in Outdoor Recreation has been budgeted for Professional Services, but there are no expenditures to date.

Administrative Services Division. Well within budget. This is due mainly to larger than expected vacancy factors in Data Processing and Administrative Support. These vacancies are largely offsetting the overspending in the "office supplies" category. We are under budget in the Accounting Bureau by approximately \$41,000 because the State Auditor has not yet billed us for services. Also, the equipment budget is under by about \$25,000 because we have not yet ordered the Computer Aided Design equipment for Construction Services.

Parks, Preserves and Recreation Division. Salaries are over budget by about \$38,000 due chiefly to a much higher level of trail construction activity. This program is funded by transfers from the REAP Land Management Account. These transfers can be increased to cover this overage with no problem. Parks utilities will exceed the annual budget by \$40,000 to \$60,000. However, the budget is under in other areas to offset this concern. Overall, recognizing the effect of the trail crew issue, this division is under budget, and no significant budget problems are anticipated at this point.

Forests and Forestry Division. This division is significantly under budget. This is due primarily to new forestry positions

being vacant for the first three or four months. The "office supply" category is over by \$25,000, but this is largely offset by both the "conservation supply" and the "other supply" categories being underbudget by a similar amount. I suspect we have simply budgeted an expenditure one place and charged it to another. We should be making plans to take advantage of this division's surplus this spring as needed for facility maintenance, equipment, and supplies.

Energy and Geological Resources Division. Due to a number of staff vacancies, the Energy Bureau is under their salary budget by about \$64,000. The "professional and scientific services" budget in several Energy programs is under spent at this point by about \$56,000.

In addition to being under budget in salaries, the Geology Bureau is generally under budget in the "professional and scientific services" category as follows: \$9,800 for the Manson Crater Site, \$7,600 for the Integrated Farm Management project, \$145,000 for the Big Springs Demonstration project, \$24,700 for Groundwater Monitoring, and \$197,000 for the Model Farms project.

Environmental Protection Division. This division is significantly under budget in the salary category and in the "professional and scientific services" category. About \$174,500 of the "professional services" category relates to LUST Cleanup. The remainder relates primarily to payment scheduling of the UHL and several smaller consulting or service contracts. This is similar to previous months.

Fish and Wildlife Division. This division is under budget in most categories. Salaries is over budget by \$18,000 primarily because the Mississippi Monitoring Project is \$25,000 over budget, by itself. Law Enforcement is under budget by about \$50,000 at this point. Fisheries is under, even with the situation in the Monitoring project. Wildlife is also under generally under budget.

Waste Management Authority Division. This division is under budget due to vacancies, and expenditures for printing running considerably less than budget at this point.

February 1990

Environmental Protection Commission Minutes

J080C105

IOWA DEPARTMENT OF NATURAL RESOURCES
SUMMARY OF EXPENDITURES VS. YEAR-TO-DATE PLAN
AS OF 01/31/90

PAGE 1

	TOTAL EXPENDITURES 01/01/90 - 01/31/90	TOTAL EXPENDITURES FY-TO-DATE	YEAR-TO-DATE PLAN	OVER/UNDER YEAR-TO-DATE PLAN	CURRENT ANNUAL BUDGET
1000 DIRECTOR'S OFFICE					
101 PERSONAL SERVICES	16,761.09	121,576.30	129,361.00	7,784.70-	223,101.00
202 PERSONAL TRAVEL	2,727.20	22,705.15	20,960.00	1,745.15	40,000.00
301 OFFICE SUPPLIES	162.31	1,414.12	600.00	814.12	1,200.00
303 EQUIPMENT MAINTENANCE SUP	304.00	498.00	600.00	102.00-	1,200.00
308 OTHER SUPPLIES	880.69	992.61	70.00	922.61	120.00
309 PRINTING & BINDING	0.00	6,580.55	6,060.00	520.55	14,120.00
405 PROF & SCIENTIFIC SERVICE	0.00	29.58	1,500.00	1,470.42-	6,000.00
406 OUTSIDE SERVICES	25.00	597.65	1,500.00	902.15-	3,200.00
410 DATA PROCESSING	235.69	1,003.13	2,000.00	996.87-	4,800.00
414 REIMBURSEMENTS TO OTHER A	60.00	441.12	0.00	441.12	0.00
501 EQUIPMENT	0.00	2,274.75	2,400.00	125.25-	4,800.00
DIVISION TOTAL	21,155.98	158,113.16	165,051.00	6,937.84-	298,541.00

J080C105

IOWA DEPARTMENT OF NATURAL RESOURCES
SUMMARY OF EXPENDITURES VS. YEAR-TO-DATE PLAN
AS OF 01/31/90

PAGE 2

	TOTAL EXPENDITURES 01/01/90 - 01/31/90	TOTAL EXPENDITURES FY-TO-DATE	YEAR-TO-DATE PLAN	OVER/UNDER YEAR-TO-DATE PLAN	CURRENT ANNUAL BUDGET
2000 COORDINATION AND INFORMATION					
101 PERSONAL SERVICES	110,990.10	846,498.40	859,415.00	12,916.60-	1,481,952.00
202 PERSONAL TRAVEL	5,127.61	25,060.04	23,748.00	1,312.04	45,800.00
203 STATE VEHICLE OPERATION	78.44	4,363.73	5,465.00	1,101.27-	10,931.00
204 STATE VEHICLE DEPRECIATIO	0.00	6,915.00	8,850.00	1,935.00-	17,700.00
301 OFFICE SUPPLIES	20,209.48	62,686.75	35,250.00	27,436.75	70,500.00
302 FACILITY MAINTENANCE SUPP	1,942.98	9,691.49	8,500.00	1,191.49	16,000.00
303 EQUIPMENT MAINTENANCE SUP	1,062.51	6,461.34	6,000.00	461.34	12,000.00
307 AG., CONSERVATION & HORT S	0.00	220.00	500.00	280.00-	500.00
308 OTHER SUPPLIES	2,899.89	31,326.57	14,350.00	16,976.57	28,700.00
309 PRINTING & BINDING	38,532.86	180,139.74	199,238.00	19,098.26-	373,950.00
312 UNIFORMS & RELATED ITEMS	26.08	1,737.99	2,424.00	686.01-	2,850.00
401 COMMUNICATIONS	1,057.39	6,766.84	4,598.00	2,168.84	9,200.00
402 RENTALS	0.00	75.14	0.00	75.14	500.00
403 UTILITIES	2,572.08	14,126.15	13,370.00	756.15	26,750.00
405 PROF & SCIENTIFIC SERVICE	0.00	41,317.50	56,120.00	14,802.50-	86,920.00
406 OUTSIDE SERVICES	5,904.83	18,133.50	21,500.00	3,366.50-	60,000.00
408 ADVERTISING & PUBLICITY	605.94	4,685.25	0.00	4,685.25	12,500.00
410 DATA PROCESSING	982.20	4,016.29	9,502.00	5,485.71-	19,600.00
414 REIMBURSEMENTS TO OTHER A	141.32	1,368.35	5,000.00	3,631.65-	5,000.00
501 EQUIPMENT	0.00	39,821.54	63,150.00	23,328.46-	63,750.00
DIVISION TOTAL	192,133.71	1,305,411.61	1,336,980.00	31,568.39-	2,345,103.00

J080C105

IOWA DEPARTMENT OF NATURAL RESOURCES
SUMMARY OF EXPENDITURES VS. YEAR-TO-DATE PLAN
AS OF 01/31/90

PAGE 3

	TOTAL EXPENDITURES 01/01/90 - 01/31/90	TOTAL EXPENDITURES FY-TO-DATE	YEAR-TO-DATE PLAN	OVER/UNDER YEAR-TO-DATE PLAN	CURRENT ANNUAL BUDGET
3000 ADMINISTRATIVE SERVICES DIV.					
101 PERSONAL SERVICES	286,810.54	2,105,866.42	2,234,841.00	128,974.58-	3,841,480.00
202 PERSONAL TRAVEL	2,965.40	23,494.97	31,033.00	7,538.03-	61,400.00
203 STATE VEHICLE OPERATION	0.00	24,935.75	31,575.00	6,639.25-	58,500.00
204 STATE VEHICLE DEPRECIATIO	0.00	32,305.00	37,625.00	5,320.00-	68,500.00
301 OFFICE SUPPLIES	43,933.78	241,750.33	192,380.00	49,370.33	340,050.00
302 FACILITY MAINTENANCE SUPP	62.39	171.33	1,000.00	828.67-	1,700.00
303 EQUIPMENT MAINTENANCE SUP	3,568.43	32,111.16	38,325.00	6,213.84-	63,390.00
308 OTHER SUPPLIES	1,154.15	7,673.66	6,816.00	857.66	12,900.00
309 PRINTING & BINDING	0.00	10,722.75	14,934.00	4,211.25-	27,075.00
312 UNIFORMS & RELATED ITEMS	0.00	1,035.45	2,500.00	1,464.55-	4,200.00
401 COMMUNICATIONS	16,230.20	107,300.30	111,738.00	4,437.70-	221,900.00
402 RENTALS	0.00	109.50	250.00	140.50-	500.00
406 OUTSIDE SERVICES	4,540.56	12,909.37	21,358.00	8,448.63-	35,950.00
410 DATA PROCESSING	10,092.34	59,280.21	61,333.00	2,052.79-	119,500.00
412 AUDITOR OF STATE REIMBURS	8,596.00	8,596.00	50,000.00	41,404.00-	112,000.00
414 REIMBURSEMENTS TO OTHER A	545.00	4,932.29	6,530.00	1,597.71-	11,650.00
501 EQUIPMENT	4,542.93	51,114.16	83,233.00	32,118.84-	139,350.00
701 LICENSES	0.00	2.50	50.00	47.50-	150.00
DIVISION TOTAL	383,041.72	2,724,311.15	2,925,521.00	201,209.85-	5,120,195.00

E90Feb-10

Environmental Protection Commission Minutes

February 1990

J080C105

IOWA DEPARTMENT OF NATURAL RESOURCES
SUMMARY OF EXPENDITURES VS. YEAR-TO-DATE PLAN
AS OF 01/31/90

PAGE 4

	TOTAL EXPENDITURES 01/01/90 - 01/31/90	TOTAL EXPENDITURES FY-TO-DATE	YEAR-TO-DATE PLAN	OVER/UNDER YEAR-TO-DATE PLAN	CURRENT ANNUAL BUDGET
4000 PARKS, PRES. & RECREATION DIV.					
101 PERSONAL SERVICES	306,967.71	2,936,879.82	2,898,150.00	38,729.82	5,073,170.00
202 PERSONAL TRAVEL	3,197.85	25,774.97	59,363.00	33,588.03-	103,709.00
203 STATE VEHICLE OPERATION	26.57	97,095.36	94,184.00	2,911.36	179,776.00
204 STATE VEHICLE DEPRECIATIO	0.00	106,655.00	161,854.00	55,199.00-	287,369.00
301 OFFICE SUPPLIES	1,825.03	18,835.18	23,046.00	4,210.82-	45,575.00
302 FACILITY MAINTENANCE SUPP	35,029.91	336,644.63	387,291.00	50,646.37-	692,568.00
303 EQUIPMENT MAINTENANCE SUP	15,827.99	151,931.61	141,527.00	10,404.61	294,000.00
307 AG., CONSERVATION & HORT S	881.97	6,929.35	3,928.00	3,001.35	19,500.00
308 OTHER SUPPLIES	7,483.85	34,795.89	14,617.00	20,178.89	26,944.00
309 PRINTING & BINDING	20,303.50	36,356.85	49,590.00	13,233.15-	102,339.00
312 UNIFORMS & RELATED ITEMS	2,350.68	14,014.06	23,744.00	9,729.94-	49,433.00
401 COMMUNICATIONS	4,541.69	41,909.01	37,536.00	4,373.01	72,182.00
402 RENTALS	572.99	19,879.26	12,052.00	7,827.26	20,490.00
403 UTILITIES	23,776.53	191,123.96	152,229.00	38,894.96	293,276.00
405 PROF & SCIENTIFIC SERVICE	0.00	6,500.00	14,500.00	8,000.00-	58,045.00
406 OUTSIDE SERVICES	16,593.42	103,252.22	92,428.00	10,824.22	165,332.00
408 ADVERTISING & PUBLICITY	276.15	276.15	3,200.00	2,923.85-	4,000.00
410 DATA PROCESSING	290.24	1,286.51	3,575.00	2,288.49-	8,000.00
414 REIMBURSEMENTS TO OTHER A	163.46	2,608.04	300.00	2,308.04	1,050.00
501 EQUIPMENT	14,458.29	132,360.47	129,441.00	2,919.47	197,730.00
DIVISION TOTAL	454,567.83	4,265,108.34	4,302,555.00	37,446.66-	7,694,488.00

J080C105

IOWA DEPARTMENT OF NATURAL RESOURCES
SUMMARY OF EXPENDITURES VS. YEAR-TO-DATE PLAN
AS OF 01/31/90

PAGE 5

	TOTAL EXPENDITURES 01/01/90 - 01/31/90	TOTAL EXPENDITURES FY-TO-DATE	YEAR-TO-DATE PLAN	OVER/UNDER YEAR-TO-DATE PLAN	CURRENT ANNUAL BUDGET
5000 FORESTRY DIVISION					
101 PERSONAL SERVICES	125,167.40	910,715.72	984,677.00	73,961.28-	1,715,917.00
202 PERSONAL TRAVEL	2,702.51	19,861.73	20,569.00	707.27-	39,275.00
203 STATE VEHICLE OPERATION	0.00	37,786.34	44,615.00	6,828.66-	75,000.00
204 STATE VEHICLE DEPRECIATIO	0.00	54,415.00	69,105.00	14,690.00-	118,900.00
301 OFFICE SUPPLIES	593.83	35,265.47	10,670.00	24,595.47	16,920.00
302 FACILITY MAINTENANCE SUPP	1,147.13	9,375.43	18,583.00	9,207.57-	31,000.00
303 EQUIPMENT MAINTENANCE SUP	2,064.65	30,594.66	30,293.00	301.66	58,660.00
307 AG., CONSERVATION & HORT S	3,903.17	62,033.75	81,950.00	19,916.25-	104,178.00
308 OTHER SUPPLIES	303.41	5,477.36	15,350.00	9,872.64-	15,900.00
309 PRINTING & BINDING	568.00	4,888.60	15,850.00	10,961.40-	17,931.00
312 UNIFORMS & RELATED ITEMS	1,847.59	9,173.03	13,891.00	4,717.97-	14,225.00
401 COMMUNICATIONS	2,099.82	12,682.80	11,765.00	917.80	23,230.00
402 RENTALS	239.00	5,143.42	9,100.00	3,956.58-	17,200.00
403 UTILITIES	4,843.89	12,060.42	15,650.00	3,589.58-	26,084.00
406 OUTSIDE SERVICES	2,647.49	11,069.79	24,000.00	12,930.21-	42,800.00
408 ADVERTISING & PUBLICITY	9.78	325.43	500.00	174.57-	600.00
410 DATA PROCESSING	188.92	838.97	620.00	218.97	700.00
414 REIMBURSEMENTS TO OTHER A	55.00	717.37	350.00	367.37	600.00
501 EQUIPMENT	1,275.46	43,941.25	85,795.00	41,853.75-	98,379.00
701 LICENSES	305.00	305.00	58.00	247.00	100.00
DIVISION TOTAL	149,962.05	1,266,671.54	1,453,391.00	186,719.46-	2,417,599.00

J080C105

IOWA DEPARTMENT OF NATURAL RESOURCES
SUMMARY OF EXPENDITURES VS. YEAR-TO-DATE PLAN
AS OF 01/31/90

PAGE 6

	TOTAL EXPENDITURES 01/01/90 - 01/31/90	TOTAL EXPENDITURES FY-TO-DATE	YEAR-TO-DATE PLAN	OVER/UNDER YEAR-TO-DATE PLAN	CURRENT ANNUAL BUDGET
6000 ENERGY & GEOLOGICAL RESOURCES					
101 PERSONAL SERVICES	160,340.09	1,162,676.72	1,239,984.00	77,307.28-	2,143,941.00
202 PERSONAL TRAVEL	1,344.65	34,913.89	44,496.00	9,582.11-	77,592.00
203 STATE VEHICLE OPERATION	0.00	10,245.42	15,800.00	5,554.58-	26,540.00
204 STATE VEHICLE DEPRECIATIO	0.00	12,435.00	13,675.00	1,240.00-	23,442.00
301 OFFICE SUPPLIES	723.45	11,650.21	8,111.00	3,539.21	13,296.00
302 FACILITY MAINTENANCE SUPP	115.27	824.50	2,300.00	1,475.50-	3,800.00
303 EQUIPMENT MAINTENANCE SUP	32.75	1,861.18	2,700.00	838.82-	3,300.00
304 PROF. & SCIENTIFIC SUPPL	0.00	2,097.64	8,300.00	6,202.36-	10,652.00
308 OTHER SUPPLIES	4,026.59	28,543.14	17,881.00	10,662.14	28,200.00
309 PRINTING & BINDING	4,921.00	10,745.02	11,719.00	973.98-	24,600.00
401 COMMUNICATIONS	1,465.56	9,336.67	10,831.00	1,494.33-	18,570.00
402 RENTALS	175.00	1,285.00	1,225.00	60.00	2,100.00
403 UTILITIES	1,000.07	6,197.54	11,821.00	5,623.46-	19,750.00
405 PROF & SCIENTIFIC SERVICE	14,694.82	314,350.45	754,191.00	439,840.55-	1,471,757.00
406 OUTSIDE SERVICES	1,493.77	6,814.60	5,156.00	1,658.60	8,763.00
410 DATA PROCESSING	851.40	4,471.02	5,545.00	1,073.98-	9,856.00
414 REIMBURSEMENTS TO OTHER A	175.00	4,195.71	3,191.00	1,004.71	6,162.00
501 EQUIPMENT	3,023.17	26,518.87	39,176.00	12,657.13-	53,601.00
DIVISION TOTAL	194,382.59	1,649,162.58	2,196,102.00	546,939.42-	3,945,922.00

February 1990

Environmental Protection Commission Minutes

J080C105

IOWA DEPARTMENT OF NATURAL RESOURCES
SUMMARY OF EXPENDITURES VS. YEAR-TO-DATE PLAN
AS OF 01/31/90

PAGE 7

	TOTAL EXPENDITURES 01/01/90 - 01/31/90	TOTAL EXPENDITURES FY-TO-DATE	YEAR-TO-DATE PLAN	OVER/UNDER YEAR-TO-DATE PLAN	CURRENT ANNUAL BUDGET
7000 ENVIRONMENTAL PROTECTION DIV.					
101 PERSONAL SERVICES	417,008.16	3,002,167.01	3,182,183.00	180,015.99-	5,500,002.00
202 PERSONAL TRAVEL	4,183.16	47,735.44	96,847.00	49,111.56-	158,000.00
203 STATE VEHICLE OPERATION	0.00	19,311.52	23,080.00	3,768.48-	43,000.00
204 STATE VEHICLE DEPRECIATIO	0.00	28,350.00	37,166.00	8,816.00-	63,000.00
301 OFFICE SUPPLIES	4,356.98	17,018.06	24,468.00	7,449.94-	33,950.00
302 FACILITY MAINTENANCE SUPP	578.36	1,206.11	2,000.00	793.89-	2,500.00
303 EQUIPMENT MAINTENANCE SUP	708.81	1,841.37	3,500.00	1,658.63-	9,800.00
304 PROF. & SCIENTIFIC SUPPL	0.00	426.80	2,700.00	2,273.20-	5,000.00
308 OTHER SUPPLIES	2,684.82	9,946.06	12,217.00	2,270.94-	24,170.00
309 PRINTING & BINDING	0.00	6,260.85	20,366.00	14,105.15-	36,150.00
312 UNIFORMS & RELATED ITEMS	1,057.53	1,740.38	2,400.00	659.62-	2,600.00
401 COMMUNICATIONS	4,281.34	18,708.17	18,150.00	558.17	35,650.00
402 RENTALS	1,447.86	26,557.60	22,565.00	3,992.60	45,065.00
403 UTILITIES	731.73	3,862.51	5,900.00	2,037.49-	14,145.00
405 PROF & SCIENTIFIC SERVICE	0.00	207,779.91	681,392.00	473,612.09-	1,188,200.00
406 OUTSIDE SERVICES	2,489.58	14,048.00	21,141.00	7,093.00-	35,150.00
408 ADVERTISING & PUBLICITY	37.47	3,441.34	2,600.00	841.34	3,100.00
410 DATA PROCESSING	11,467.36	51,330.07	76,475.00	25,144.93-	137,500.00
414 REIMBURSEMENTS TO OTHER A	350.00	3,996.46	8,575.00	4,578.54-	13,950.00
501 EQUIPMENT	16,572.09	141,577.21	308,472.00	166,894.79-	456,950.00
701 LICENSES	20.00	50.00	285.00	235.00-	285.00
DIVISION TOTAL	467,975.25	3,607,354.87	4,552,482.00	945,127.13-	7,808,167.00

J080C105

IOWA DEPARTMENT OF NATURAL RESOURCES
SUMMARY OF EXPENDITURES VS. YEAR-TO-DATE PLAN
AS OF 01/31/90

PAGE 8

	TOTAL EXPENDITURES 01/01/90 - 01/31/90	TOTAL EXPENDITURES FY-TO-DATE	YEAR-TO-DATE PLAN	OVER/UNDER YEAR-TO-DATE PLAN	CURRENT ANNUAL BUDGET
8000 FISH AND WILDLIFE DIVISION					
101 PERSONAL SERVICES	762,169.72	5,799,603.87	5,780,679.00	18,924.87	9,929,917.00
202 PERSONAL TRAVEL	24,536.70	182,768.33	191,837.00	9,068.67-	354,865.00
203 STATE VEHICLE OPERATION	44.59	218,540.52	276,112.00	57,571.48-	502,455.00
204 STATE VEHICLE DEPRECIATIO	0.00	303,230.00	336,695.00	33,465.00-	587,706.00
301 OFFICE SUPPLIES	8,380.80	115,808.90	122,112.00	6,303.10-	175,590.00
302 FACILITY MAINTENANCE SUPP	30,326.14	245,504.62	275,143.00	29,638.38-	515,191.00
303 EQUIPMENT MAINTENANCE SUP	20,903.10	213,037.70	240,200.00	27,162.30-	390,099.00
307 AC., CONSERVATION & HORT S	14,616.86	118,743.88	153,074.00	34,330.12-	344,562.00
308 OTHER SUPPLIES	7,354.81	67,224.29	61,035.00	6,189.29	105,888.00
309 PRINTING & BINDING	3,030.00	75,266.10	93,834.00	18,567.90-	128,226.00
312 UNIFORMS & RELATED ITEMS	9,816.39	65,202.69	71,224.00	6,021.31-	124,850.00
401 COMMUNICATIONS	13,943.34	87,152.16	75,901.00	11,251.16	161,317.00
402 RENTALS	881.00	14,846.33	25,562.00	10,715.67-	48,750.00
403 UTILITIES	19,340.18	93,792.92	110,283.00	16,490.08-	220,306.00
405 PROF & SCIENTIFIC SERVICE	9,750.00	91,071.09	139,416.00	48,344.91-	173,968.00
406 OUTSIDE SERVICES	5,625.32	99,457.11	80,018.00	19,439.11	140,616.00
408 ADVERTISING & PUBLICITY	0.00	11,386.72	4,105.00	7,281.72	4,850.00
410 DATA PROCESSING	782.57	32,895.28	29,041.00	3,854.28	38,000.00
414 REIMBURSEMENTS TO OTHER A	35,674.47	50,208.26	56,100.00	5,891.74-	96,250.00
501 EQUIPMENT	27,980.09	132,023.95	232,826.00	100,802.05-	351,661.00
602 OTHER EXPENSES & OBLIGATI	0.00	1,250.00	350.00	900.00	600.00
701 LICENSES	0.00	120.00	98.00	22.00	170.00
DIVISION TOTAL	995,156.08	8,019,134.72	8,355,645.00	336,510.28-	14,395,837.00

J080C105

IOWA DEPARTMENT OF NATURAL RESOURCES
SUMMARY OF EXPENDITURES VS. YEAR-TO-DATE PLAN
AS OF 01/31/90

PAGE 9

	TOTAL EXPENDITURES 01/01/90 - 01/31/90	TOTAL EXPENDITURES FY-TO-DATE	YEAR-TO-DATE PLAN	OVER/UNDER YEAR-TO-DATE PLAN	CURRENT ANNUAL BUDGET
9000 WASTE MANAGEMENT AUTHORITY					
101 PERSONAL SERVICES	30,324.23	205,844.20	215,878.00	10,033.80-	374,082.00
202 PERSONAL TRAVEL	919.76	17,161.90	12,943.00	4,218.90	22,000.00
301 OFFICE SUPPLIES	47.75	5,013.33	4,187.00	826.33	7,325.00
308 OTHER SUPPLIES	68.29	912.90	3,998.00	3,085.10-	7,000.00
309 PRINTING & BINDING	3,851.62	8,592.82	21,260.00	12,667.18-	27,200.00
406 OUTSIDE SERVICES	146.76	5,588.62	3,495.00	2,093.62	6,000.00
410 DATA PROCESSING	270.18	1,195.13	3,495.00	2,299.87-	6,000.00
414 REIMBURSEMENTS TO OTHER A	134.92	7,323.34	7,579.00	255.66-	12,150.00
501 EQUIPMENT	525.58	525.58	8,000.00	7,474.42-	8,000.00
DIVISION TOTAL	36,289.09	252,157.82	280,835.00	28,677.18-	469,757.00

MONTHLY REPORTS

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

The following monthly reports are enclosed with the agenda for the Commission's information.

1. Rulemaking Status Report
2. Variance Report
3. Hazardous Substance/Emergency Response Report
4. Enforcement Status Report
5. Contested Case Status Report

Members of the department will be present to expand upon these reports and answer questions.

(Reports are shown on the following 8 pages)

IOWA DEPARTMENT OF NATURAL RESOURCES
 ENVIRONMENTAL PROTECTION COMMISSION
 RULEMAKING STATUS REPORT
 February 1, 1990

PROPOSAL	NOTICE TO COMMISSION	NOTICE PUBLISHED	RULES REVIEW COMMITTEE	HEARING	SUMMARY OF COMMENTS & RECOMMENDATIONS TO COMMISSION	RULES ADOPTED	RULES PUBLISHED	RULE EFFECTIVE
1. Ch. 22 - Controlling Air Pollution	10/16/89	11/15/89	12/05/89	11/27/89 11/28/89 12/06/89	1/16/90	1/16/90	2/07/90	3/14/90
2. Ch. 23 - Asbestos Demolition and Renovation	2/19/90	*3/21/90	*4/90	*4/90	*5/90	*5/90	*6/90	*7/90
3. Ch. 25 and 30 - Toxic Air Emissions	*3/19/90	*4/21/90	*5/90	*5/90	*6/90	*6/90	*7/90	*8/90
4. Ch. 39 - Plugging Abandoned Wells	10/16/89	11/15/89	12/05/89	12/11/89 12/12/89 12/13/89	2/19/90	*2/19/90	*3/21/90	*4/25/90
5. Ch. 40, 41 & 43 - Water Supply Surface Water Filtration	*3/19/90	*4/18/90	*5/90	*5/90	*6/90	*6/90	*7/90	*8/90
6. Ch. 41 - Public Water Supplies	8/21/89	9/20/89	10/10/89	10/10/89 10/11/89 10/12/89	1/16/90	1/16/90	2/07/90	3/14/90
7. Ch. 60-62 - Water Quality Standards	7/17/89	8/09/89	9/11/89	8/29/89 8/30/89 8/31/89 9/06/89	*3/19/90	*3/19/90	*4/18/90	*5/23/90
8. Ch. 100, 101 - General Requirements Relating to Solid Waste Disposal	*3/19/90	*4/18/90	*5/90	*5/90	*6/90	*6/90	*7/90	*8/90
9. Ch. 100, 102 - Solid Waste Operator Certification	*3/19/90	*4/18/90	*5/90	*5/90	*6/90	*6/90	*7/90	*8/90
10. Ch. 100, 104, 105 - Compost and Yard Waste	*3/19/90	*4/18/90	*5/90	*5/90	*6/90	*6/90	*7/90	*8/90
11. Ch. 101.3 - Farm Waste Rules	10/16/89	11/15/89	12/05/89	12/05/89 12/06/89 12/07/89	*3/19/90	*3/19/90	*4/18/90	*5/23/90
12. Ch. 102, 109, 121 - SW Permits, Fees and Land Application	*3/19/90	*4/18/90	*5/90	*5/90	*6/90	*6/90	*7/90	*8/90
13. Ch. 118 - Removal and Disposal of PCBs from White Goods Prior to Processing	1/16/90	2/07/90	2/90	3/14/90 3/15/90 3/16/90	*4/90	*4/90	*5/90	*6/90
14. Ch. 119 - Waste Oil	1/16/90	2/07/90	2/90	3/14/90 3/15/90 3/16/90	*4/90	*4/90	*5/90	*6/90
15. Ch. 121 - Land Treatment of Petroleum Contaminated Soils	*3/19/90	*4/18/90	*5/90	*5/90	*6/90	*6/90	*7/90	*8/90
16. Ch. 135 - LUST Cleanup	2/19/90	*3/21/90	*4/90	*4/90	*5/90	*5/90	*6/90	*7/90

*Projected

MONTHLY VARIANCE REPORT

Month: January, 1990

No.	Facility	Program	Engineer	Subject	Decision	Date
1.	DNR - Pikes Peak State Park	Air Quality		Structures	Approved	01/04/90
2.	Corn Belt Power - Humboldt	Air Quality		Emission Standard	Approved	01/08/90
3.	Corn Belt Power - Spencer	Air Quality		Emission Standard	Approved	01/08/90
4.	Chrisman Reclamation-Marion County	Air Quality	James Montgomery Co.	Landscape Waste	Approved	01/09/90
5.	Albia, City of	Wastewater Construction	Garden & Associates	Site Separation	Approved	01/03/90
6.	Sac City, City of	Wastewater Operations		Monitoring Frequency	Approved	01/02/90
7.	Midwest Flyash Landfill - Wapello County	Solid Waste	James Montgomery Co.	Leachate	Denied	01/02/90
8.	Page County Landfill	Solid Waste	James Montgomery Co.	Laboratory Testing-Soil Permeability Sampling	Denied	01/02/90
9.	Page County Landfill	Solid Waste	James Montgomery Co.	Laboratory Testing-Soil Grain Size Distribution Sampling	Denied	01/02/90
10.	Griffin Wheel Landfill - Lee County	Solid Waste	James Montgomery Co.	Laboratory Testing-Soil Permeability Sampling	Denied	01/04/90
11.	Griffin Wheel Landfill - Lee County	Solid Waste	James Montgomery Co.	Laboratory Testing-Soil Grain Size Distribution Sampling	Denied	01/04/90
12.	Stone City General Store - Jones County	Watersupply Construction	Hart Engineering	Siting Criteria	Approved	01/09/90

TOPIC: Report of Hazardous Conditions

During the period JANUARY 1, 1990 through JANUARY 31, 1990, reports of 104 hazardous conditions were forwarded to the Central Office. Two incidents are highlighted below. A general summary and count by field office is attached. These do not include releases from underground storage tanks, which are reported separately.

Date Reported and County	Description: Material, Amount, Date of Incident, Cause, Location, Impact	Responsible Party	Response and Corrective Actions
01/03/90 SCOTT	A passenger car collided with the side of a semi-truck, causing approximately 40 gallons of diesel fuel to spill onto the street.	Roederer Transfer & Storage Company, 513 Filmore, Davenport, Iowa 52802	The street was blocked off to eliminate ignition sources. A nearby sewer opening was closed, and the fuel was absorbed with sand.
01/22/90 SHELBY	Approximately 4,000 gallons of 28% Nitrogen liquid fertilizer leaked from a hole in an above-ground storage tank.	Farm Service Co-Op., 208 6th. Street, Harlan, Iowa 51537	An earth dike surrounding the tank contained most of the Nitrogen. Pooled liquid was pumped up; contaminated soil was excavated for field application.

E90Feb-15

NUMBERS IN PARENTHESES REPRESENT REPORTS FOR THE SAME PERIOD IN FISCAL YEAR 1989

Month	Substance Type					Mode				
	Total # of Incidents	Petroleum Product	Agri. Chemical	Other Chemicals and Substances	Handling and Storage	Pipeline	Highway Incident	RR Incident	Fire	Other
Oct	89	62	10	17	52	3	10	1	1	22
Nov	57	36	4	17	39	1	10	2	0	5
Dec	65	43	4	18	32	3	9	3	2	16
Jan	104(54)	76(32)	6(6)	22 (16)	72(32)	2(0)	16(10)	4(3)	3(3)	7(6)

Total # of Incidents Per
Field Office
This Period

01 02 03 04 05 06
14 15 9 11 30 25

Enforcement Report Update

The following new enforcement actions were taken last month:

Name, Location and Field Office Number	Program	Alleged Violation	Action	Date
Knollridge Garden Apartments Iowa City (6)	Drinking Water	Monitoring/Reporting-Bacteria	Order/Penalty	1/5/90
Lynnville, City of (5)	Wastewater	Monitoring/Reporting	Referred to AG	1/17/90
Regional Environmental Improvement Commission in Iowa County (6)	Solid Waste	Operational Violations	Referred to AG	1/17/90
Nozey Habhab, et.al. Fort Dodge (2)	Air Quality	Open Burning	Referred to AG	1/17/90
Alta Vista Homeowner's Association, Ames (5)	Drinking Water	Monitoring/Reporting Nitrate, Radionuclides	Referred to AG	1/17/90
Rasch Construction, Inc. Webster County (2)	Air Quality	Open Burning	Order/Penalty	1/19/90
R.J. Kool Co., Cedar Rapids (1)	Solid Waste	Open Burning	Order/Penalty	1/19/90
Carroll, City of (4)	Wastewater	Discharge Limits	Amended Order	1/19/90
Cleon Merrill d/b/a Arrow-Acme Corp. Webster City (2)	Air Quality	Construction without Permit	Order	1/19/90
Holiday Lake Water System, Ltd. Brooklyn (5)	Drinking Water	Construction without Permit	Order/Penalty	1/23/90
Triggs Trailer Corporation Belmond (2)	Drinking Water	Monitoring/Reporting Bacteria	Order/Penalty	1/24/90
Colfax Center Presbyterian Church Holland (5)	Drinking Water	Monitoring/Reporting Bacteria	Order/Penalty	1/24/90
Lytton, City of (3)	Wastewater	Pretreatment	Order/Penalty	1/30/90
American Meat Protein Corp., Denison (3)	Wastewater	Pretreatment	Order/Penalty	1/30/90
Anthony's Resort Sherrill (1)	Drinking Water	Monitoring/Reporting Bacteria	Order/Penalty	1/30/90
Clayton King and Duane Coe, Mason City (2)	Air Quality	Open Burning	Order/Penalty	1/30/90
Pla-Mor Bowl of Iowa Falls, Inc. Iowa Falls (2)	Drinking Water	Monitoring/Reporting Bacteria	Order/Penalty	1/30/90

SUBJECT: Summary of Administrative Penalties

The following administrative penalties are due:

NAME/LOCATION	PROGRAM	AMOUNT	DUE DATE	ary 1990
Handi-Klasap, Inc. (Webster City)	WW/HC	1,000	8-02-88	
Soo Line Railroad Company (Mason City)	HC	1,000	8-07-89	
Timber Lake Estates (Swisher)	WS	100	1-01-90	
DeWitt Moose Lodge (DeWitt)	WS	200	1-06-90	
Darlo Schaap (Sioux Center)	SW	600	1-14-90	
Stringtown Country Cafe (Lenox)	WS	200	2-01-90	
Sioux By-Products Co. (Sioux City)	AQ	500	2-05-90	
Pony Creek Homeowners Assoc. #1 (Pacific Junction)	WS	200	2-08-90	
Wellendorf Trust (Algona)	AQ/SW	460	2-12-90	
Victor Carlson (Ft. Dodge)	AQ	1,000	2-13-90	
George J. Heitland (Heitland Const.) (Franklin Co.)	SW	600	2-13-90	
River City Ready-Mix, Inc. (Mason City)	AQ	400	2-19-90	
*Tin Shed (Argyle)	WS	375	2-25-90	
Thompson Water Supply	WS	200	2-28-90	
James R. Morrow, d/b/a Morrow Sawmill (Wayland)	AQ/SW	1,000	3-12-90	
Knollridge Garden Apts. (Iowa City)	WS	260	3-16-90	
Rasch Construction, Inc. (Ft. Dodge)	AQ	1,000	3-23-90	
R. J. Kool, Co. (Cedar Rapids)	SW	600	3-23-90	
Holiday Lake Water System Ltd. (Brooklyn)	WS	700	3-25-90	
Triggs Trailer Corporation (Belmond)	WS	215	3-26-90	
Colfax Center Presbyterian Church (Holland)	WS	630	3-26-90	
American Meat Protein Corp. (Lytton)	WW	1,000	-----	
Lytton, City of	WW	1,000	-----	
Clayton Kin & Duane Coe (Mason City)	AQ	380	-----	
Pla-Mor Bowl of Iowa Falls, Inc. (Iowa Falls)	WS	630	-----	
Anthony's Resort (Sherrill)	WS	230	-----	
Valley Oaks Golf & Country Club (Clinton)	WS	705	-----	

The following cases have been referred to the Attorney General:

NAME/LOCATION	PROGRAM	AMOUNT	DUE DATE
Shelter Shield (Buffalo Center)	AQ	1,000	12-03-86
OK Lounge (Marion)	WS	448	11-01-87
Richard Davis (Albia)	SW	1,000	2-28-88
McCabe's Supper Club (Burr Oak)	WS	335	12-14-88
Eagle Wrecking Co. (Pottawattamie Co.)	SW	300	5-07-89
*Twelve Mile House (Bernard)	WS	119	5-20-89
*Lawrence Payne (Ottumwa)	SW	425	6-19-89
Stan Moser (Hudson)	SW	250	6-27-89
Gilbert John Fjone (Swaledale)	SW	400	7-04-89
Glenn C. Sevick (Mason City)	SW	400	7-17-89
Richard Kleindolph (Muscatine)	SW	500	8-17-89
Robert Fisch (Manchester)	AQ	600	9-01-89
Jeffrey Allen Miller (Shell Rock)	SW	1,000	9-09-89
William L. Bown (Marshalltown)	SW	1,000	10-01-89
Arthur Gross (West Union)	FP	300	10-23-89
Nozey & Mildred Habhab/John F. Constable (Ft. Dodge)	AQ	1,000	10-17-89

The following administrative penalties have been appealed:

NAME/LOCATION	PROGRAM	AMOUNT
AMOCO Oil Co. (Des Moines)	UT	1,000
Iowa City Regency MHP	WW	1,000
Thomas E. Lennon (Barnum)	FP	700
Great Rivers Coop (Atavia)	HC	1,000
1st Iowa State Bank (Albia)	SW	1,000
Cloyd Foland (Decatur)	FP	800
Land O' Lakes, Inc. (Ellsworth)	WW	1,000
City of Marcus	WS	1,000
Superior-Ideal, Inc. (Oskaloosa)	WW	1,000
IBP, inc. (Columbus Junction)	WW	600
Fred's 66 (Davenport)	HC	1,000
King's Terrace Mobile Home Court (Ames)	WW	1,000
King's Terrace Mobile Home Court (Ames)	WS	315
Premium Standard Farms, Inc. (Boone Co.)	WW/AQ	700
Amoco Oil Co. (West Des Moines)	UT	1,000
Paul Klorberdanz d/b/a The Mart (Danville)	UT	1,000
Circle Hill Farms, Ltd. (Ellsworth)	SW	600
Cozy Cafe (Lucas)	WS	500
East Side Acres (Merville)	WS	600
Stone City Iron & Metal Co. (Anamosa)	AQ	1,000
Donald P. Ervin (Ft. Dodge)	SW	1,000
Monty Branstad (Leland)	AQ	400
Craig Natvig (Cerro Gordo Co.)	SW	1,000
4 E's Farm, Inc. (Algona)	SW	600
Manson Water Supply	WS	500
Iowa Public Service (Sioux City)	AQ	600
Ruth Ann Coe (Mason City)	AQ/SW	1,000
Joe Villinger (West Point)	SW	500
Midwest Mining, Inc. (Harrison Co.)	FP	800

*On Payment Schedule

90Feb-17

February 1990

Environmental Protection Commission Minutes

DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION COMMISSION
ATTORNEY GENERAL REFERRALS
February, 1990

Name, Location and Region Number	New or Updated	Program	Alleged Violation	DNR Action	Status	Date
					Referred	12/16/82
					EPA suit filed	2/26/87
					State intervention	3/05/87
					Motion to dismiss granted/denied	2/26/88
					Filed interlocutory appeal	3/11/88
					Decision in favor of govt.	4/04/89
					Petition for rehearing denied	7/19/89
Aidex Corporation Council Bluffs (4)		Hazardous Waste	Release of Hazardous Substances	Referred to Attorney General		
Alta Vista Homeowners Assoc., Ames (5)	New	Drinking Water	Monitoring Report Nitrate-Radionuclides	Order/Penalty	Referred Penalty Paid	1/17/90 1/22/90
Amoco Oil Co. Stuart (4)		Underground Tank	Prohibited Discharge Failure to Report Hazardous Condition	Referred to Attorney General	Referred	6/21/89
ASPRO, Inc. Waterloo (1)		Air Quality	Excess Emissions	Order	Referred	2/16/88
Bell Watcher, Inc., Powsheik Co. (5)		Wastewater	Operational Violations	Referred to Attorney General	Referred	9/20/89
William L. Bown Marshalltown (5)		Solid Waste	Open Dumping	Order/Penalty	Referred	11/20/89
					Referred	2/20/87
					Default Judgment \$7500	6/22/87
					Second Lawsuit Filed	8/07/88
					Consent Decree	8/23/88
					Filed New Case	11/01/88
Bozarth and Bell, Inc. Davenport (6)		Solid Waste	Open Dumping	Order		
Chalfant, Milo, et.al. Webster City (2)		Solid Waste	Open Dumping	Order/Penalty	Referred	9/20/89
Clinton Pallet Co. Clinton (6)		Solid Waste	Open Dumping	Referred to Attorney General	Referred Suit Filed	6/21/89 11/09/89
Cooper, Kenneth/Hunter Oil Minburn (5)		Storage Tank	Spill Cleanup	Order	Cooper Referred Hunter Referred	10/27/87 8/17/88
					Referred	6/22/88
					Suit Filed	8/11/88
					Default Judgement	4/21/89
					Filed Motion to Deny Default	6/14/89
					Motion Overruled	10/04/89
Davis, Richard & Sonja (5)		Solid Waste	Open Unpermitted Dumping	Referred to Attorney General		
Gianetta, Dominic d/b/a Fred's 66, Davenport (6)		Underground Tank	Remedial Action	Order/Penalty	Referred	12/11/89
Eagle Wrecking Co. Pottawattamie Co. (4)		Solid Waste	Open Dumping	Order/Penalty	Referred Bankruptcy Claim Filed	6/21/89 7/24/89
Ellsworth, City of (2)		Wastewater	Discharge Limits	Order	Referred	4/18/89
Robert Fisch Manchester (1)		Air Quality	Open Burning	Order/Penalty	Referred Motion for Summary Judgment	10/24/89 12/05/89
Gilbert Fjone Swaledale (2)		Solid Waste	Open Dumping	Order/Penalty	Referred	10/24/89
Arthur & David Gross West Union (1)		Flood Plain	Construction Without Permit	Order/Penalty	Referred	11/20/89
					Referred	12/15/87
					Suit Filed	3/24/88
					Trail Set	1/10/90
					Consent Decree	1/23/90
Hilltop Feeders (Jorgenson) Winneshiek (1)	Updated	Air Quality	Operation Without Permit	Order		
Humboldt Co. Landfill Commission (2)		Solid Waste	Cover Violations	Order/Penalty	Referred	11/20/89
Iben, Fred Monticello (1)		Solid Waste	Open Dumping	Order	Referred	11/20/89
					Referred	1/24/89
					Administrative Penalty Paid	2/23/89
Kinsinger, Vernon Kalona (1)	Updated	Solid Waste Air Quality	Open Dumping Open Burning	Order/Penalty	Trail Set	3/27/90

The following administrative penalties were paid last month:

NAME/LOCATION	PROGRAM	AMOUNT
American Coals Corp. (Marion County)	SW/AQ	1,000
Grundy County Landfill Commission (Grundy Center)	\$W	600
Clutier Water Supply	WS	500
Gladbrook, City of	WS	700
Trellex Morse, Inc. (Keokuk)	AQ	900
Alta Vista Homeowners Assoc. (Ames)	WS	200
*Tin Shed (Argyle)	WS	125

E90Feb-18

*On Payment Schedule

TOTAL \$4,025

Environmental Protection Commission Minutes

February 1990

DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION COMMISSION
ATTORNEY GENERAL REFERRALS
February, 1990

Name, Location and Region Number	New or Updated	Program	Alleged Violation	DNR Action	Status	Date
Richard Kleindolph Muscatine (6)		Solid Waste	Open Dumping	Order/Penalty	Referred	10/24/89
Lakeshore Drive, Inc. et.al. Osceola (5)		Flood Plain	Reconstruction	Order	Referred	11/20/89
Land O'Lakes, Inc. Ellsworth (2)		Wastewater	Prohibited Discharge	Referred to Attorney General	Referred Petition Filed	9/20/89 11/30/89
Larson, Daryl, D.V.M. Audubon (4)		Wastewater	Prohibited Discharge	Referred to Attorney General	Referred	11/20/89
Lehigh Clay Products, et.al. Lehigh (2)		Hazardous Condition	Remedial Action	Order	Referred Petition Filed	9/20/89 12/01/89
Lynnvile, City of (5) Mike McGinnis, Alfred Patten and Dennis Lewis Pottawattamie Co. (4)	New	Wastewater	Monitoring/Reporting	Referred to Attorney General	Referred	1/17/90
Jeffrey Allen Miller Shell Rock (2)		Solid Waste	Open Dumping	Referred to Attorney General	Referred Suit Filed	10/24/89 11/15/89
Monfort, Inc. (5)		Air Quality	Open Burning	Order/Penalty	Referred	10/24/89
Moser, Stan	Updated	Wastewater	Prohibited Discharge	Referred to Attorney General	Referred Petition Filed Trial Set Court Order	12/11/89 7/19/89 9/12/89 3/15/90 1/24/90
Nozey Habbab, et.al., Fort Dodge, (2)	New	Solid Waste	Open Dumping	Order/Penalty	Referred	1/17/90
Petroleum Marketing Co. (PEMCO) Malcom (5)	Updated	Air Quality	Open Burning	Order/Penalty	Referred	1/17/90
Regional Environmental Improvement Commission in Iowa County (6)	Updated	Wastewater	Compliance Schedule	Referred to Attorney General	Referred Petition & Consent Decree	10/24/89 1/29/90
Renslow, Donald Grand Junction (4)	New	Solid Waste	Operational Violations	Referred to Attorney General	Referred	1/17/90
Sani-Wash Corporation Clinton (6)		Underground Tank	Failure to Monitor	Order	Referred Suit Filed Default Judgement	8/17/88 12/30/88 3/06/89
Schultz, Albert and Iowa Iron Works Ely (1)		Wastewater	Prohibited Discharge	Referred to Attorney General	Referred	8/23/89
Glenn Seveck Mason City (2)		Solid Waste	Open Dumping	Referred to Attorney General	Referred	9/20/89
Sevig, Gordon, et.al. Walford (1)	Updated	Wastewater	Prohibited Discharge	Referred to Attorney General	Referred Petition Filed	10/24/89 12/19/89
Stickle Enterprises, Ltd. et.al., Cedar Rapids (6)		Wastewater	Prohibited Discharge	Referred to Attorney General	Referred	9/20/89
Touchdown Co., et. al., Webster City (2)		Air Quality	Open Burning	Referred to Attorney General	Referred Suit Filed	9/20/89 10/17/89
Turner, Ken Ft. Madison (6)		Underground Tank	Failure to Report Hazardous Condition	Referred to Attorney General	Referred	6/21/89
Wiltgen Construction Co. Calmar (1)		Solid Waste	Open Dumping	Referred to Attorney General	Referred Petition Filed	6/21/89 9/13/89
Yocum, Max Johnson (6)		Solid Waste	Open Dumping	Order/Penalty	Referred	11/20/89 1/12/90
		Flood Plain	Prohibited Construction	Defending	Suit Filed	12/18/84
				Referred to Attorney General	Referred Counter Claim Filed	7/12/85 10/85
					Trial Held	6/16/87
					Judgment for Department	8/18/87
					Court of Appeals Affirmed	
					Judgment	11/29/88
					Further Review Denied	2/06/89
					Contempt Hearing Rescheduled	9/29/89

February 1990

Environmental Protection Commission Minutes

DEPARTMENT OF NATURAL RESOURCES
 ENVIRONMENTAL PROTECTION COMMISSION
 CONTESTED CASES
 February, 1990

DATE RECEIVED	NAME OF CASE	ACTION APPEALED	PROGRAM	ASSIGNED TO	STATUS
1-23-86	Oelwein Soil Service	Administrative Order	WW	Landa	Hearing continued.
6-12-86	ADM - Clinton	Administrative Order	Air	Landa	Hearing continued/Settlement proposed.
12-03-86	City of Nauke	Administrative Order	WS	Hansen	Construction completed.
5-12-87	Iowa City Regency MHP	Administrative Order	WM	Hansen	Hearing held 11-03-87.
6-11-87	Thomas Lennon	Administrative Order	FP	Clark	Appealed to District Court.
8-10-87	Great Rivers Co-op	Administrative Order	HC	Landa	Final report approved. Settlement proposed.
1-15-88	First Iowa State Bank	Administrative Order	SW	Kennedy	Continued. Settlement pending.
1-22-88	IBP, Fort Dodge	NPDES Permit	WW	Hansen	Appeal withdrawn.
2-04-88	Beaverdale Heights, Woodsman; Westwood Mills	Administrative Order	SW	Landa	Compliance actions initiated.
2-05-88	Warren County Brenton Bank	Administrative Order	UT	Landa	Phase II completed. Report submitted.
3-01-88	Cloyd Foland	Administrative Order	FP	Clark	Appealed to Supreme Court.
4-13-88	Land O'Lakes, Inc.	Administrative Order	WM	Murphy	Negotiating before filing.
5-16-88	Marcus, City of	Administrative Order	WS	Landa	Compliance achieved/Settlement proposed.
7-01-88	Superior Ideal, Inc.	Administrative Order	WM	Hansen	Hearing continued pending settlement discussions.
7-25-88	Nishna Sanitary Service, Inc.	Permit Conditions	SW	Landa	Compliance initiated/Plans submitted.
8-03-88	Hardin County	Permit Conditions	SW	Landa	Compliance actions initiated/Plans submitted.
10-03-88	IBP, Columbus Junction	Administrative Order	WW	Clark	Hearing continued.
10-20-88	North Co. Co-Op Oil Northwood Cooperative Elevator Sunray Refining and Marketing Co.	Administrative Order	HC	Landa	Hearing continued. Compliance initiated.
12-02-88	Davis Co. Board of Supervisors	Administrative Order	AQ	Landa	Hearing continued.
1-25-89	Amoco Oil Co. - Des Moines	Administrative Order	UT	Landa	Settlement proposed. Clean up progressing.
1-30-89	City of New Market	Permit Revision	WS	Hansen	Appeal withdrawn.
2-10-89	Northwestern States Portland Cement Company	Site Registry	HW	Landa	Hearing continued.
2-10-89	Baier/Mansheim/Hoyer	Site Registry	HW	Landa	Hearing continued/Settlement proposed.
2-13-89	King's Terrace Mobile Home Court	Administrative Order	WM	Murphy	Negotiating before filing.
2-13-89	King's Terrace Mobile Home Court	Administrative Order	WS	Murphy	Negotiating before filing.
2-16-89	John Deere Co. - Dubuque	Site Registry	HW	Landa	Hearing continued/settlement proposed.
2-16-89	Premium Standard Farms	Administrative Order	WM/AQ	Murphy	Hearing continued.
3-14-89	Dannie R. Hoover and Bill Edwards	Flood Plain Permit Issuance	FP	Clark	Hearing held 1/26/90.
4-18-89	Star Coal Company	SWA Denial	SW	Landa	Hearing scheduled for 2/13/90.
5-01-89	Amoco Oil Company - West Des Moines	Administrative Order	UT	Landa	Compliance initiated.
6-07-89	Paul Klobardanz, d/b/a The Mart	Administrative Order	UT	Landa	Decision rendered/Appealed/Upheld by EPC.
6-08-89	Shaver Road Investments	Site Registry	HW	Landa	Hearing continued/Discovery initiated.
6-08-89	Hawkeye Rubber Mfg. Co.	Site Registry	HW	Landa	Hearing continued/Discovery initiated.
6-08-89	Lehigh Portland Cement Co.	Site Registry	HW	Landa	Hearing continued/Discovery initiated.
6-08-89	Jay Winders	Permit Denial	FP	Clark	Negotiating before filing.
6-12-89	Amana	Site Registry	HC	Landa	Negotiating before filing.
6-19-89	Grand Mound, City of	Administrative Order	WM	Hansen	Hearing continued. Revised Plan of Action submitted
6-22-89	Chicago & Northwestern Transporta- tion Co. Hawkeye Land Co. Blue Chip Enterprises	Administrative Order	HC	Landa	Hearing scheduled for 3/13/90.

Environmental Protection Commission Minutes

February 1990

DEPARTMENT OF NATURAL RESOURCES
 ENVIRONMENTAL PROTECTION COMMISSION
 CONTESTED CASES
 February, 1990

DATE RECEIVED	NAME OF CASE	ACTION APPEALED	PROGRAM	ASSIGNED TO	STATUS
7-11-89	Circle Mill Farms, Ltd.	Administrative Order	SW	Kennedy	Settlement pending.
7-19-89	Lehigh Portland Cement Co.	Administrative Order	HC	Landa	Settlement discussions initiated.
7-26-89	Cozy Cafe	Administrative Order	WS	Hansen	Negotiating before filing.
7-26-89	Midland Brick	Administrative Order	AQ	Landa	Compliance initiated.
8-31-89	Howard McKee	Clean-up Costs	HC	Murphy	Proposed decision 1/2/90.
9-01-89	Charles Clapp	Administrative Order	UT	Landa	Decision rendered/appealed.
9-01-89	Stone City Iron & Metal	Administrative Order Permit Denial	AQ	Kennedy	Settled.
9-09-89	Monsanto	Site Registry	HC	Landa	Settlement proposed.
9-13-89	Carroll, City of	Administrative Order	WW	Murphy	Negotiating before filing.
9-22-89	Modern Manor Mobile Home Park	Administrative Order	WS	Kennedy	Decision rendered.
9-26-89	East Side Acres	Administrative Order	WS	Hansen	Order issued on 1/23/90. No appeal received.
10-04-89	Donald P. Ervin	Administrative Order	SW	Kennedy	Hearing held 11-02-89. Waiting for decision.
10-12-89	Electro-Coatings, Inc.	Administrative Order	HC	Landa	Settlement proposed.
10-16-89	Monty Branstad	Administrative Order	AQ	Kennedy	Negotiating before filing.
10-24-89	Farmers Cooperative Elevator Association of Sheldon	Site Registry	HC	Landa	Negotiation proceeding.
10-24-89	Consumers Cooperative Association	Site Registry	HC	Landa	Negotiation proceeding.
10-26-89	Craig Natvig	Administrative Order Flood Plain	SW	Kennedy	Sent to DIA. Hearing set for 1-26-90.
10-30-89	Northwestern States Portland Cement Co.	Administrative Order	HC	Landa	Settled.
10-31-89	Peabody International Corp.	Administrative Order	HC	Landa	Hearing scheduled for 3-05-90.
11-01-89	Sam Levine/Morris Levine	Site Registry	HC	Landa	Negotiating before filing.
11-03-89	Bridgestone/Firestone, Inc.	Site Registry	HC	Landa	Hearing continued pending negotiations.
11-15-89	Alcoa	Site Registry	HC	Landa	Hearing scheduled for 2/21/90.
11-15-89	4 E's Farms, Inc. and Alphons Erpelding	Administrative Order	SW	Hansen	Negotiating before filing.
11-17-89	Aten Services, Inc.	Administrative Order	SW/UT	Landa	Compliance initiated.
11-27-89	Hanson, City of	Administrative Order	WS	Hansen	Negotiating before filing.
11-29-89	Clutier, City of	Administrative Order	WS	Hansen	Penalty paid.
12-11-89	Leo Schachtner	Flood Plain Permit Issuance	FP	Clark	Negotiating before filing.
12-12-89	Henry Ketelsen	Administrative Order	UT	Landa	Hearing scheduled for 2/20/90.
12-14-89	Iowa Public Service Co. - Sioux City	Administrative Order	AQ	Landa	Hearing scheduled for 2/26/90.
12-20-89	Tin Shed	Administrative Order	WS	Clark	Settled.
12-21-89	Robert Coppinger and Velma Nehman	Flood Plain Permit Denial	FP	Clark	Hearing set for 2/23/90.
12-22-89	Alter Trading Corporation	Administrative Order	SW	Murphy	Negotiating before filing.
1-02-90	Midwest Mining, Inc.	Administrative Order	FP	Clark	Negotiating before filing.
1-03-90	Victor Carlson	Administrative Order	AQ	Clark	Negotiating before filing.
1-04-90	Joe Villinger	Administrative Order	SW	Kennedy	Negotiating before filing.
1/08-90	Northwestern State Portland Cement Co.	Permit Amendment	WW	Landa	Sent DIA.
1-10-90	George J. Heitland, d.b.a Heitland Construction Co.	Administrative Order	SW	Kennedy	Settled.
1-10-90	Ruth Ann Coe	Administrative Order	AQ SW	Kennedy	Negotiating before filing.
1-18-90	Midland Fly Ash and Materials	Permit Variance Denial	SW	Landa	Negotiating before filing.

This was an informational item; no action was required.

LANDFILL ALTERNATIVE GRANT APPLICATIONS

Teresa Hay, Division Administrator, Waste Management Authority Division, presented the following item.

Sixty-two proposals were received in the current round of the Landfill Alternatives grant program. Funding requests totalled \$6.3 million dollars. One million dollars was available for allocation. A summary of the proposals is attached.

The following proposals have been selected for funding in the current round:

- 1) #1 Environmental Recycling Co. - \$300,000 requested, \$140,000 awarded
- 2) #6 Geode Wonderland RC&D - \$52,852 requested, \$14,500 awarded
- 3) #9 Ames Area Recycling Center - \$24,500 requested, \$22,000 awarded
- 4) #16 Shive Hattery - \$3,150 requested, \$3,150 awarded
- 5) #17 DSM Metro SW Agency - \$37,500 requested, \$25,000 awarded
- 6) #20 Sac County - \$176,200 requested, \$150,000 awarded
- 7) #21 Postville - \$23,384 requested, \$23,380 awarded
- 8) #25 Keokuk/Ft. Madison - \$40,500 requested, \$40,500 awarded
- 9) #30 Mason City Recycling - \$297,000 requested, \$127,270 awarded
- 10) #43 SIMPCO - \$25,689 requested, \$19,200 awarded
- 11) #46 Packaging Corp of America - \$410,000 requested, \$150,000 awarded
- 12) #49 Cedar County - \$182,747 requested, 130,000 awarded
- 13) #62 Des Moines County - \$204,825 requested, \$155,000 awarded

Contract negotiations are underway. Contracts over \$25,000 will be brought to the Commission for approval.

PROPOSAL #55: UNIVERSITY OF NORTHERN IOWA

GRANT REQUEST: \$50,000

DESCRIPTION: Requesting funds for feasibility study on burning waste fuel with coal in new boiler.

PROPOSAL #56: UNIVERSITY OF NORTHERN IOWA

GRANT REQUEST: \$3,475

DESCRIPTION: Requesting funds to purchase a paper baler.

PROPOSAL #57: RURAL ANSWERS INSTITUTE

GRANT REQUEST: \$24,000

DESCRIPTION: Requesting funds for equipment for a new recycling center in Franklin County.

PROPOSAL #58: CBS RECYCLING

GRANT REQUEST: \$88,680

DESCRIPTION: Requesting funds for labor and equipment for white goods recycling.

PROPOSAL #59: MEN'S REFORMATORY (ANAMOSA)

GRANT REQUEST: \$300,000

DESCRIPTION: Requesting funds for design and construction of boiler modifications and power plant auxiliaries for the combustion of waste wood.

PROPOSAL #60: MEN'S REFORMATORY (ANAMOSA)

GRANT REQUEST: \$71,234

DESCRIPTION: Requesting funds for salary, curbside collection of leaf waste and equipment for composting.

PROPOSAL #61: BLUEBERRY PATCH, LTD.

GRANT REQUEST: \$15,000

DESCRIPTION: Requesting funds to do a study on waste paper recycling in Des Moines.

PROPOSAL #49: CEDAR COUNTY WORKSHOP

GRANT REQUEST: \$182,747

DESCRIPTION: Requesting funds to expand current recycling operation. Looking to expand to a voluntary curbside collection system for the city of Tipton.

PROPOSAL #50: CITY CARTON CO.

GRANT REQUEST: \$103,000

DESCRIPTION: Seeking funds to purchase a rubber conveyer for paper and plastics to upgrade current recycling operation.

PROPOSAL #51: BREMER COUNTY

GRANT REQUEST: \$40,000

DESCRIPTION: Seeking reimbursement for costs incurred in getting DNR permit for incinerator.

PROPOSAL #52: ROBERT GRAVES

GRANT REQUEST: \$20,000

DESCRIPTION: Requesting funds to expand collection of plastic and glass in Jackson County.

PROPOSAL #53: SCOTT COUNTY

GRANT REQUEST: \$111,648

DESCRIPTION: Project would include county-wide recycling operation and the making of animal bedding from newsprint. Operations also includes composting of yard waste.

PROPOSAL #54: INTEGRATED ENVIRONMENTAL SYSTEMS DEVELOPMENT

GRANT REQUEST: \$55,000

DESCRIPTION: Requesting expansion of composting facility at the Waste Resource Reduction Center in Iowa Falls.

PROPOSAL #43: SIOUXLAND INTERSTATE METRO PLANNING COUNCIL

GRANT REQUEST: \$25,689

DESCRIPTION: Requesting funds for seed program for Woodbury and Monona Counties to address recycling and volume reduction issues via public education and promotion.

PROPOSAL #44: CITY OF SIOUX CITY

GRANT REQUEST: 4267,500

DESCRIPTION: Requesting funds to expand composting operation for yard waste.

PROPOSAL #45: IOWA WASTE REDUCTION CENTER

GRANT REQUEST: \$130,000

DESCRIPTION: Requesting funds for a fluidized bed reactor and engineering/economic study on the use/reuse of thermal reclamation of foundry sand.

PROPOSAL #46: PACKAGING CORPORATION OF AMERICA

GRANT REQUEST: \$410,000

DESCRIPTION: Requesting funding for equipment to expand paper recycling. PCA uses post-consumer paper waste in the production of recycled paper goods.

PROPOSAL #47: FIRESTONE TIRE AND RUBBER

GRANT REQUEST: \$200,000

DESCRIPTION: Requests funds for equipment to upgrade existing boiler to do a feasibility study for burning tires for volume reduction.

PROPOSAL #48: CITY OF COUNCIL BLUFFS

GRANT REQUEST: \$380,000

DESCRIPTION: Seeking assistance to help fund a mechanized separation system from SPM Group.

PROPOSAL #36: CITY OF IOWA CITY

GRANT REQUEST: \$285,650

DESCRIPTION: Funding for yard waste compost facility.

PROPOSAL #37: IOWA PLASTICS

GRANT REQUEST: \$110,000

DESCRIPTION: Requesting funds for operation that manufactures products made from post-consumer plastics.

PROPOSAL #38: NORTH WEST IOWA AREA SOLID WASTE AGENCY

GRANT REQUEST: \$114,725

DESCRIPTION: Requesting funds on the expansion of current recycling operations.

PROPOSAL #39: IOWA TIMBER PRODUCTS, INC.

GRANT REQUEST: \$123,000

DESCRIPTION: Requesting funding for wood-fired boiler and wood chipping equipment.

PROPOSAL #40: FARMEGG PRODUCTS

GRANT REQUEST: \$6,120

DESCRIPTION: Proposing to investigate the social/economic benefits of composting livestock waste and solid waste for land application.

PROPOSAL #41: HOLLAND INDUSTRIES

GRANT REQUEST: \$41,600

DESCRIPTION: Wants funds to purchase an extruding machine and pelletizing machine for polystyrene.

PROPOSAL #42: SIOUXLAND RECOVERY

GRANT REQUEST: \$289,000

DESCRIPTION: Requesting funds to expand current recycling operation which handles paper and white goods.

PROPOSAL #30: MASON CITY RECYCLING CENTER, LTD.

GRANT REQUEST: \$297,000

DESCRIPTION: Requesting funds to expand current recycling operations including facility renovation, baling equipment, a truck, advertising, a shredder and product testing.

PROPOSAL #31: RECYCLE IOWA, INC.

GRANT REQUEST: \$337,820

DESCRIPTION: Requesting funds to start up a recycling facility to service the SEMCO planning region.

PROPOSAL #32: NISHNA SANITARY SERVICE, INC.

GRANT REQUEST: \$192,000

DESCRIPTION: Construction of a facility to handle yard waste, paper, plastic, glass, tires, white goods, lead/acid batteries and waste oil.

PROPOSAL #33: JOE EGGERS

GRANT REQUEST: \$1,450

DESCRIPTION: Requesting funds for gasoline, oil, electricity and up keep costs for current recycling operations.

PROPOSAL #34: AMERICAN COALS

GRANT REQUEST: \$129,418

DESCRIPTION: Demonstration of the use of sewage treatment sludge and coal ash residues and yard wastes as a soil amendment for the reclamation of orphan mine lands.

PROPOSAL #35: IOWA STATE UNIVERSITY

GRANT REQUEST: \$101,895

DESCRIPTION: Requesting funds for testing of various uses for fluidized bed combustion fly ash.

PROPOSAL #24: V&Y TRUCK AND TRAILER

GRANT REQUEST: \$16,754

DESCRIPTION: Requesting funding to purchase waste oil heaters, storage tanks, and storage building.

PROPOSAL #25: KEOKUK/FT. MADISON

GRANT REQUEST: \$40,500

DESCRIPTION: Implementation/evaluation of yard waste management project involving public education, incentives, and curbside collection and composting.

PROPOSAL #26: MT PLEASANT CORRECTIONAL FACILITY

GRANT REQUEST: \$29,200

DESCRIPTION: Requesting funds for brush chipper to create mulch.

PROPOSAL #27: MT PLEASANT CORRECTIONAL FACILITY

GRANT REQUEST: \$10,000

DESCRIPTION: Demonstration of the use of calcium carbonate (from domestic water treatment) as a soil conditioner.

PROPOSAL #28: SWISS VALLEY FARMS CO.

GRANT REQUEST: \$40,120

DESCRIPTION: Requesting funds for 50 collection boxes, a collection truck and personnel for a milk jug collection program.

PROPOSAL #29: ST. LUKES HOSPITAL, SIOUX CITY

GRANT REQUEST: \$20,000

DESCRIPTION: Study to demonstrate a correlation between HCl emissions and the levels of dioxin/furans in health care facility incinerators.

PROPOSAL #18: MARSHALLTOWN REDEMPTION CENTER, INC.

GRANT REQUEST: \$73,580

DESCRIPTION: Proposing to expand operations from drop-off to curbside collection.

PROPOSAL #19: PLYMOUTH COUNTY

GRANT REQUEST: \$38,200

DESCRIPTION: Requesting funds to build a transfer station to transfer waste to Cherokee. Includes a public information program.

PROPOSAL #20: SAC COUNTY AND HOWARD ACTIVITY CENTER, INC.

GRANT REQUEST: \$176,200

DESCRIPTION: Establishment of a county-wide recycling system in Sac County. Proposing curbside collection along with drop-off collection. Uses HAC staff. Developing composting operation also.

PROPOSAL #21: CITY OF POSTVILLE

GRANT REQUEST: \$23,384

DESCRIPTION: Establish composting program. Accepting yard, garden and food waste. Co-composting with sewage sludge would be investigated.

PROPOSAL #22: AREA RESIDENTIAL CARE VOCATIONAL SERVICES CENTER

GRANT REQUEST: \$39,005

DESCRIPTION: Proposing project to collect, sort, perforate or shred and bale post-consumer plastic and paper. Includes the use of drop-off boxes and collection of plastics from local beverage container distributors.

PROPOSAL #23: OPERATION CLEAN DAVENPORT

GRANT REQUEST: \$15,000

DESCRIPTION: Requesting funds for a public education program encouraging residents to leave grass clippings on yard after mowing and to promote the benefits of doing so.

PROPOSAL #12: MIDWEST FLYASH AND MATERIALS, INC.

GRANT REQUEST: \$89,250

DESCRIPTION: Proposes to use flyash and cement kiln dust for recreational trail surfacing.

PROPOSAL #13: HAMMER PLASTIC RECYCLING CORP.

GRANT REQUEST: \$29,000

DESCRIPTION: Requesting funds to test the effectiveness of encapsulating railroad ties with recycled plastics.

PROPOSAL #14: HAMMER PLASTIC RECYCLING CORP.

GRANT REQUEST: \$30,000

DESCRIPTION: Proposes testing for the enhancement of the physical properties of mixed plastics.

PROPOSAL #15: HABSKO

GRANT REQUEST: \$25,000

DESCRIPTION: Similar to #13 and #14

PROPOSAL #16: SHIVE-HATTERY

GRANT REQUEST: \$3,150

DESCRIPTION: Proposing a study of the physical, chemical, and hydraulic properties of shredded tires for utilization as a substitute for drainage soil in landfills.

PROPOSAL #17: DES MOINES METRO AREA SOLID WASTE AGENCY

GRANT REQUEST: \$37,500

DESCRIPTION: Program to address volume reduction through educational materials, promotional materials, and technical assistance and cooperative activities with local schools.

PROPOSAL #6: GEODE WONDERLAND RC&D

GRANT REQUEST: \$52,852

DESCRIPTION: Wants to do a feasibility study concerning the use of sawdust and like materials as mulch for large scale tree planting operations.

PROPOSAL #7: COMMODITY CONSULTANTS

GRANT REQUEST: \$22,940

DESCRIPTION: Requesting funds to demonstrate composting of hog slurry and biodegradable household and yard wastes.

PROPOSAL #8: WORTH COUNTY CONSERVATION BOARD

GRANT REQUEST: \$59,500

DESCRIPTION: Wants funding for a wood chipper to make chips for landscape use. Also looking at market development for wood chips for uses such as mulch, fuel and animal bedding.

PROPOSAL #9: AMES AREA RECYCLING CENTER

GRANT REQUEST: \$24,500

DESCRIPTION: Requesting funds to purchase a crusher for cans and glass bottles and for a multi-use front-end loader (with fork lift attachment). Also wants to hire a recycling coordinator.

PROPOSAL #10: GERALD AND SANDY'S RECYCLING CENTER

GRANT REQUEST: \$20,185

DESCRIPTION: Requesting funds to purchase equipment to expand current drop-off recycling operation.

PROPOSAL #11: AMERICAN RECYCLING

GRANT REQUEST: \$38,204

DESCRIPTION: Requesting grant to expand current appliance recycling business. Operations include stripping appliances for metal recovery and capacitor disposal.

LANDFILL ALTERNATIVES GRANTS
PROPOSALS: SPRING 1990

PROPOSAL #1: ENVIRONMENTAL RECYCLING CO.

GRANT REQUEST: \$300,000

DESCRIPTION: Existing company (formerly D&K Recyclers) requesting funds for expansion of operations. The company recycles glass, cardboard, and plastic and collects from many industrial sources. Funding would pay for facilities, processing equipment and transportation equipment.

PROPOSAL #2: CITY OF OTTUMWA

GRANT REQUEST: \$26,084

DESCRIPTION: Feasibility study for using waste oil as an energy recovery source.

PROPOSAL #3: CITY OF DES MOINES

GRANT REQUEST: \$87,425

DESCRIPTION: Demonstration project doing a feasibility study of the effectiveness of co-composting MSW and municipal sewage sludge (MSS).

PROPOSAL #4: MAR-ROB ENTERPRISES

GRANT REQUEST: \$133,225

DESCRIPTION: Requesting funds to purchase equipment to expand tire reuse operation. Current use of the tires is to rebuild corn huskers.

PROPOSAL #5: DICKSON'S ROLLOFFS

GRANT REQUEST: \$19,500

DESCRIPTION: Requesting funds to provide a service which provides commercial accounts with a specialized rolloff container especially for recyclable goods.

PROPOSAL #62: DES MOINES COUNTY**GRANT REQUEST: \$204,825****DESCRIPTION:** Requesting funds for a building and equipment for a county-wide recycling center utilizing handicapped staff.

Ms. Hay gave an explanation of each of the 13 proposals which were selected for funding in the current round. She noted that staff is in the process of preparing grant contracts and they will be ready for the Commission's approval at next month's meeting.

Chairperson Mohr asked if staff would prepare, for distribution to the Commission, a map of Iowa depicting the areas where grant funding has been provided.

Ms. Hay responded that a map is available and will be provided to the Commission.

Margaret Prah1 stated that she would like to see the process and criteria that is used by staff to select projects for funding. She added that she feels if the Commission understood the scoring mechanism as well as criteria, it might help in making decisions for approval of grants.

This was an informational item; no action was required.

**PROPOSED RULE--CHAPTER 101 REVISION, GENERAL REQUIREMENTS
RELATING TO SOLID WASTE DISPOSAL**

Teresa Hay, Division Administrator, Waste Management Authority Division, presented the following item.

The Commission is requested to review the proposed rule revision relating to requirements of Solid Waste Comprehensive Plans, Part 1. The purpose of the revision is to implement sections 3, 28, 29, 30, and 31 of H.F. 753, the Waste Volume Reduction and Recycling Act, of the 1989 Iowa Acts. These sections pertain to Comprehensive Plans, Part 1.

An advisory committee has been formed to review and comment on the rules. The committee includes representatives from citizen groups, solid waste agencies, council of governments, counties, municipalities, and state government. The committee will meet on February 13, 1990, to provide initial comments.

The proposed rule revision:

- Adds a definitions section;
- Defines duties of cities and counties;
- States that comprehensive plans must be submitted in conjunction with all local governments using the sanitary disposal project;
- States volume reduction and recycling goals of 25% by July 1, 1994 and 50% by July 1, 2000;
- Defines a procedure for local governments to provide evidence of cooperation with the plan;
- Describes methods for waste which is received from or disposed of outside the planning area, including out-of-state;
- Provides methods by which the volume reduction and recycling goals may be measured and achieved;
- Expands the requirements for public education programs and strategies;
- Requires that recycling programs must contain a specific methodology for meeting the state volume reduction and recycling goals, and describes that methodology;
- Specifies how to examine motor oil, lead-acid batteries, white goods, waste tires, and yard waste for existing and potential recyclability;
- States further requirements for methodologies to be used if incineration for energy recovery or volume reduction is an alternative;
- Describes the procedure to be used to examine expected environmental impacts;
- Describes the requirements for plans submitted after the initial plan has been approved.

(Rule is shown on the following 5 pages)

ENVIRONMENTAL PROTECTION COMMISSION (567)

Chapter 101
General Requirements Relating To
Solid Waste Disposal

567--101.1(455B & 455D) Definitions. "Local governments" means those counties or municipalities using the sanitary disposal project.

"Planning area" means the localities and facilities involved in any aspect of the sanitary disposal project's management of waste, including out-of-state localities and facilities, if applicable.

"Recycling" means any process by which waste, or materials which would otherwise become waste, are collected, separated, or processed and revised or returned to use in the form of raw materials or products. "Recycling includes but is not limited to the composting of yard waste which has been previously separated from other waste and collected by the sanitary disposal facility, but does not include any form of energy recovery.

"Waste reduction" means practices which reduce, avoid, or eliminate both the generation of solid waste and the use of toxic materials so as to reduce risks to health and the environment and to avoid, reduce or eliminate the generation of wastes or environmental pollution at the source and not merely achieved by shifting a waste output or waste stream from one environmental medium to another environmental medium. Waste reduction includes but is not limited to home yard waste composting, which prevents yard waste from entering the waste stream.

567--101.12(455B) Compliance. All solid waste shall be stored, collected, transported, utilized, processed, reclaimed or disposed of in a manner consistent with requirements of these rules.

567--101.23(455B) Variances. The director may issue, modify, or deny variances from the rules in this title. The applicant may appeal the decision of the director to the commission. This rule is intended to implement Iowa code section 455B.303.

567--101.34(455B) General conditions of solid waste disposal. Solid waste must be disposed at a sanitary disposal project approved by the director.

567--101.5(455B & 455D) Duties of cities and counties. Every city and county of this state shall provide for the establishment and operation of a comprehensive solid waste reduction program consistent with the Waste Management Hierarchy under subrule 101.6(5)a, and a sanitary disposal project for final disposal of solid waste by its residents. Comprehensive programs and sanitary disposal projects may be established separately or through cooperative efforts for the joint use of participating public agencies as provided by law.

All cities and counties shall file with the director a comprehensive plan detailing the method by which the city or county will comply with the requirements to establish and implement a comprehensive solid waste reduction program for its residents. If the city or county does not participate in the

preparation of a regional comprehensive plan, then the city or county must file a comprehensive plan separately.

If a city or county facility refuses any particular solid waste type, it must identify an alternative waste management facility for that waste within that city or county. If no alternative waste management facility for waste exists within the city or county, the city or county must establish one.

567--101.46(455B & 455D) Comprehensive plans. Cities, counties and private agencies operating or planning to operate a sanitary disposal project after July 1, 1988 shall, in conjunction with all local governments using the sanitary disposal project, file with the director either prior to or at the time of application for issuance, renewal or reissuance of a sanitary disposal project permit, a comprehensive plan. At a minimum, The plan shall be updated and refiled with the department every-three-years-or at the time of each subsequent application for issuance, renewal, or reissuance of a sanitary disposal project permit. The department may require filing and updating a plan at other times. The department shall act to coordinate and expedite planning activities for multicounty areas where feasible.

101.46(1) Comprehensive planning goal purpose. The goal purpose of a comprehensive plan submitted according to 101.46(2), and-(3)(5), (6) and (7) is the development of a specific plan and schedule for implementing technically and economically feasible solid waste management methods that will prevent or minimize adverse environmental impact.

101.6(2) State volume reduction and recycling goals. The goal of the comprehensive plan of each planning area of the state is to reduce the amount of materials in the waste stream, existing as of July 1, 1988, twenty-five percent by July 1, 1994, and fifty percent by July 1, 2000, through the practice of waste volume reduction at the source and through recycling.

101.6(3) Evidence of cooperation. When a comprehensive plan is submitted to the department, it must be accompanied by a letter or letters from all local governments using or planning to use the sanitary disposal project. The letter shall include a statement that the governmental body has reviewed the plan and will adopt the recommendations contained in the plan. The letter shall briefly summarize what those recommendations are.

101.4(2)6(4) Content of a comprehensive plan. In fulfillment of the requirements of Iowa Code section 455B.306(3), and 455B.301A, and 455D a comprehensive plan or revision to a comprehensive plan shall include the following information:

a. A description of the planning area and the public and private agencies involved, including a description of each agency's role in managing solid waste generated in the area.

If any waste is to be received from, disposed of, or otherwise managed outside of the delineated planning area, an amendment to the plan is required before the waste may be managed. All out-of-state localities in any Iowa planning area are subject to the same comprehensive planning rules as Iowa localities.

b. A description of past local and regional planning activities,

101.6(4)c A description of the waste stream as of July 1, 1988 in tons per year, including the amount of residential waste generated per person and the amount of commercial/industrial waste generated. This description shall be used to calculate baseline data. The baseline data will be used to

demonstrate progress toward meeting the state volume reduction and recycling goals pursuant to section 101.6(2).

ed. A description of the current and projected 20 year waste composition and waste generation rates, including a listing of industrial and commercial generators in the area.

de. A description of the existing waste management system, its capacity, disposal costs per ton, including full cost accounting measures to address fully the true cost of landfilling, and projected 20-year disposal costs,

ef. An analysis of alternative waste management systems according to the state's waste management hierarchy,

fg. A description of the proposed waste management system for the planning area based upon the results of the alternatives analysis,

gh. In the case of a sanitary disposal project landfill, a specific plan and schedule for fully implementing the comprehensive plan no later than July 1, 1997, and

hi. A description of the methods of financing to be used.

A guidance document describing in more detail the content of a comprehensive plan, part I, is available from the records center of the department at 515/281-8860. The document title is "Guidelines for Solid Waste Comprehensive Plans, Part I: Waste Management Alternatives." July 1, 1990.

101.4(3)6(5) Alternatives analysis.

a. Alternative solid waste management systems shall be evaluated according to the following waste management hierarchy, listed in descending order of preference:

- (1) Volume reduction at the source,
- (2) Recycling and reuse,
- (3) Combustion with energy recovery,
- (4) Combustion for volume reduction,
- (5) Landfilling.

b. A complete analysis of alternatives shall include at a minimum:

(1) The -development-of-or-participation-in-a-public-education-program-to reduce-the-volume-of-solid-waste-generated-by-residents;-farms;-businesses; and-industries; A detailed description of a public education program for source reduction and recycling by residences, farms, businesses, and industries. The public education program must address, at a minimum, household hazardous materials, tires, motor oil, lead-acid batteries, backyard composting, and methods of materials separation and recycling. Public education strategies, estimated costs, and materials must be described fully in the plan. Strategies should include but not be limited to public meetings during the planning and implementation stages and other forms of information dissemination, such as workshops and advertisements. Materials may include but not be limited to brochures, audiovisual materials, posters, and billboards. The Waste Management Authority Division of the Iowa Department of Natural Resources may be contacted for assistance. Timelines for public education activities must be included in the plan.

(2) Details of a local recycling program which shall contain a specific methodology for meeting the state volume reduction and recycling goals pursuant to 101.6(2), and a methodology for implementing a program of separation of wastes including but not limited to glass, plastic, paper, and metal. The methodologies must include but not be limited to:

- (1) Public education strategies (reference ed. part)

recycling-prior-to-combustion; If incineration for energy recovery or volume reduction is an alternative, then the plan must include methodologies for the separation of recyclable and reusable materials, materials which result in uncontrolled toxic or hazardous air emissions when burned, and hazardous or toxic materials which are not rendered nonhazardous or nontoxic by incineration. Separation of waste includes, but is not limited to, magnetic separation. The removed materials shall be recycled, reused or treated and disposed in a manner that is consistent with the waste management hierarchy as described in subrule 101.6(5).

(56) Description of expected environmental impacts from the alternative waste management systems including any negative impacts on water, groundwater, air quality, plant life, animal life, and human health;. For all new sanitary landfills the description shall include a thorough inventory of plant and animal species. In preparing the inventory, the permit applicant shall contact the department's Natural Area Inventory Unit with a request to determine the presence of or habitat for any threatened or endangered species or communities and any forests, prairies or wetlands. In the event that the department's Natural Area Inventory Unit does not contain records of rare species or community but their presence is suspected, the permit applicant may be required to conduct an approved site survey. At the department's option, department staff may undertake the survey. The description shall also include the impact on landmarks of historical, religious, archaeological, scenic, natural or other cultural significance.

(67) Inclusion of established and anticipated regulatory requirements regarding the future siting, operation, closure and post closure of solid waste facilities, and

(78) Completion of the cost analysis worksheets contained in the "Guidelines For Solid Waste Comprehensive Plans, Part I: Waste Management Alternatives." This document is available upon request from the department.

101.4(4)6(6) Plan review. A plan submitted according to 101.4(2)6(4),(5),(6) and (37) shall be reviewed by the department for its accuracy, completeness, and appropriateness of baseline data and alternatives analysis, for the environmental and economic feasibility of selected waste management systems, for the plan's adherence to the state's waste management hierarchy, for compliance with statutory deadlines, and for the agency's commitment to public education and adequate financing. The director may reject, suggest modification, or approve a plan based upon these criteria.

101.6(7) Subsequent plans. After the initial plan has been approved, all subsequent plans must include all elements in 101.6 and a thorough evaluation of progress toward meeting the state volume reduction and recycling goals as detailed in subrule 101.6(2).

567--101.57(455B) Contracts with permitted agencies.

101.57(1) Every city, county, and other public agency which complies with the requirements of Iowa Code chapter 455B for the disposal of solid waste by means of a contract with an agency holding a sanitary disposal project permit or by means of a contract with a hauler who has a contract with an agency holding a sanitary disposal project permit shall submit to the department a photostatic copy of that executed contract. All such agencies shall have on file at the department at all times a valid contract. When the term of the

contract expires, a renewal of the contract or a new contract shall be submitted.

101.57(2) All public agencies which contract with a hauler to comply with the requirements of part 1 of division IV of chapter 455B shall include as terms of that contract that all solid waste collected by the hauler for that agency shall be disposed at a sanitary disposal project permitted by the department.

Date

Larry J. Wilson, Director

Ms. Hay presented a detailed explanation of the proposed rule. She stated that the advisory committee met last week and provided some initial comments on the rules, and they will be involved in developing the new guidelines for preparing the plans.

Margaret Prah1 commented that in many of the rules the Director is permitted to make variances without any standards for the variances. She was concerned that presently the Director is given wide, unfettered discretion in dealing with the citizens in granting variances and she does not feel that is appropriate. Mrs. Prah1 requested that the department provide some standards for granting variances.

Following discussion of the issue, it was the consensus of the Commission that variance decisions should remain with the Director and continue to be handled as they are now handled.

Discussion followed regarding tire disposal, stockpiling tires, and tire shredding. Also discussed was section 101.5 of the proposed rules and the possibility of redundancy by both cities and counties.

Ms. Hay explained that in most cases the city provides collection services and the county operates the landfill. She added that most of the cities file a comprehensive plan together with the county and rural areas.

Richard Hartsuck stated that he would like to see the counties be made the responsible entity for providing solid waste management.

Ms. Hay pointed out that the department does not have the authority to make that requirement.

It was suggested that this might possibly be one of the Commission's legislative items for next year.

This was an informational item; no action was required.

GRANTS TO COMPOSTING PROJECTS WITH DEGRDABLE BAGS

Teresa Hay, Division Administrator, Waste Management Authority Division, presented the following item.

The Department received a \$200,000 appropriation from the Petroleum Overcharge Funds to develop composting technologies using biodegradable plastic bags and yard waste. The law directed the Department to establish a minimum of one project at a large solid waste disposal project and a minimum of two projects at small solid waste disposal projects. Last year a request for proposals was mailed to local governments and planning agencies throughout the state to solicit proposals to construct and operate a composting site. The Department received nine proposals. Attached is a list of the proposals that were submitted.

The City of Dubuque/Dubuque County was selected as the large project, and the City of Grinnell and the City of Carroll/Carroll County were selected as the two small projects. Attached are three separate scopes of work and budgets for each project. The scope of work for all the projects are similar. A different composting technique is used on each of the projects to gather information on how the differing techniques effect the degradability of the plastic bags. Each composting technique is outlined in the scope of work. In all projects this is the first major effort in the respective communities to implement yard waste composting. Grant monies will be used to pay for preparation of a composting area, purchase of necessary composting equipment, and promotion of the program in the community.

Testing of the degradability of the plastic bags will be accomplished by the Center for Crop Utilization Research at Iowa State University. The projects plan to test the effectiveness of six different degradable plastic bags. A portion of the \$200,000 appropriation will be used to pay for this testing.

Composting Proposals Using Degradable Plastic Bags

Large Solid Wate Disposal Projects:

* Dubuque Metro Solid Waste Agency/City of Dubuque * City of Des Moines * Ottumwa - Wapello Landfill * Black Hawk County

Dubuque Metro SW Agency/City of Dubuque

- existing small scale project at the Dubuque Arboretum - hired a solid waste coordinator to supervise activities - took new permitting requirements into consideration in designing their project (included an impervious pad) - will pickup all yard waste in degradable bags - will include a Christmas tree chipping program in the project

City of Des Moines

- requested funding for the project started in fall of 1989 - residents can use up to 8 non-degradable plastic bags per week - measurement of degradability of bags would be difficult since project is well under way

Ottumwa - Wapello

- no mention of moisture control in windrows - no runoff collection - no information on planning that had gone into the project

Black Hawk County

- no specifics in terms of budget or operation of facility - no decision as to who will operate the facility - proposal consisted of 4 page cover letter with the composting portion of their draft comprehensive plan

Small solid Waste Disposal Projects:

* City of Grinnell * Carroll County * City of Monona * City of Spencer * Buena Vista County

City of Grinnell

- addressed all permitting requirements - proposed tests for determining degradability of the bags (done in cooperation with ISU Center for Crop Utilization Research) - well planned proposal, from promotion to collection to composting and testing

Carroll County

- proposed using several different types of degradable bags - will involve all municipalities within the county

City of Monona

- proposal was unclear as to how collection would be done - no runoff control planned - no solid estimate as to how much yard waste is generated by the city

City of Spencer

- did not propose to use degradable plastic bags

Buena Vista County

- did not propose to use degradable plastic bags

SCOPE OF WORK - CITY OF DUBUQUE/DUBUQUE COUNTY

1. The Contractor shall conduct a yard and leaf waste collection program in the City of Dubuque from July 1, 1990 to June 30, 1991 using biodegradable plastic bags. The Contractor shall also demonstrate the composting of yard waste collected as outlined in section 5.

2. The Contractor shall establish a public education and marketing strategy to increase citizen participation in the yard waste collection program.

3. The Contractor shall assess the environmental impact the Project will have, both positive and negative.

4. The Contractor shall set forth a proposed method for the actual collection of yard waste or an incentive plan to encourage the collection of yard waste in the City of Dubuque.

5. Methodology

Operation:

Two major windrows will be constructed in the experimental portion of the compost area. One windrow will consist of yard waste which has been shredded prior to the composting process, and the other windrow will be shredded and amended with a nitrogen source.

Sampling

Each windrow will be sampled every two weeks for residue from the plastic bags. Four samples shall be taken from the outside of the windrow and four samples shall be taken from the center of the windrow. These eight samples shall be taken for all types of plastic bags that are used in the project. Samples of the bags shall be taken every two weeks until the composting process is completed for each windrow. The samples shall only contain residue from the plastic bags. The temperature at the center of the windrow shall be recorded when the sampling is done.

6. The Contractor shall submit plans and specifications for the composting operation to the Environmental Protection Division of the Department before construction of the Project begins. No funding will take place before the appropriate permits are obtained.

7. The Contractor shall purchase on a competitive basis the equipment specified in the plans costing over \$10,000. The Department will fund the purchase of equipment only after the Contractor documents items 2, 3, 4, and 5 have been addressed and receives approval from the Department.

8. The Contractor shall monitor the collection of the yard waste during the term of the contract, and shall determine the amount of waste collected on a monthly basis.

9. The Contractor shall maintain information on the methodology employed in the composting of the yard waste during the term of the contract. The composting material must be monitored for temperature, percent moisture content, volume collected. The ambient temperature must be monitored. The permit will specify the frequency of this monitoring.

10. The Contractor shall test the final compost for percent total solids, oxygen consumption rate, total organic carbon, nitrogen (TKN), lignin, and cellulose.

11. The Contractor shall submit monthly reports on the Project. The reports shall discuss the status of the project and the information collected in items 8, 9, and 10.

12. The Contractor shall develop a pictorial history via slides of the Project complete with data on project development from early initiation, start-up, to completion necessary for presentation of the Project at Waste Management Conferences, trade journals, and other sources to disseminate the results of the Project. The Contractor shall conduct at least one media-notified open house after the Project is operational and shall encourage visits at other times on a scheduled basis.

13. The Contractor shall submit a final report on the Project. The final report shall include:

- 1) An evaluation of the public education and marketing strategy.
- 2) A summary of the volume of waste collected at the composting site.
- 3) A summary of all methodology involved in the collection, transportation, and composting of the waste.
- 4) A summary of the laboratory analysis performed on the finished compost.
- 5) A summary of the markets used for the finished compost.
- 6) A summary of the environmental impact of the Project.

7) A description of the collection or incentive plan implemented with the Project.

8) An assessment of the viability of conducting this type of project in other communities, counties, and regions of the State of Iowa.

Budget

	Grant	Match
Labor		41,000
Equipment	100,000	131,300
Site Prep.		260,000
Promotion		2,000
Equip Maint.		18,000
Total	\$100,000	\$452,300

SCOPE OF WORK - CARROLL COUNTY

1. The Contractor shall conduct a yard and leaf waste collection program in Carroll County from July 1, 1990 to June 30, 1991 using biodegradable plastic bags. The Contractor shall also demonstrate the composting of yard waste collected as outlined in section 5.

2. The Contractor shall establish a public education and marketing strategy to increase citizen participation in the yard waste collection program.

3. The Contractor shall assess the environmental impact the Project will have, both positive and negative.

4. The Contractor shall set forth a proposed method for the actual collection of yard waste or an incentive plan to encourage the collection of yard waste in the Carroll County.

5. Methodology

Distribution of the Bags:

Each of the bags shall be used for a two week period in the collection program. The date each type of bag is distributed and collected and transferred to the composting site shall be recorded.

Operation:

One major windrow will be constructed in the experimental portion of the compost area. The windrow may consist of yard waste collected in all types of plastic bags, but each type of bag shall be initially placed in a specified portion of the windrow. The windrow shall consist of yard waste contained in the plastic bags which not been shredded prior to the composting process.

Sampling

Each windrow will be sampled every two weeks for residue from the plastic bags. Four samples shall be taken from the outside of the windrow and four samples shall be taken from the center of the windrow. These eight samples shall be taken for all types of plastic bags that are used in the project. Samples of the bags shall be taken every two weeks until the composting process is completed for each windrow. The samples shall only contain residue from the plastic bags. The temperature at the center of the windrow shall be recorded when the sampling is done.

6. The Contractor shall submit plans and specifications for the composting operation to the Environmental Protection Division of the Department before construction of the Project begins. No funding will take place before the appropriate permits are obtained.

7. The Contractor shall purchase on a competitive basis the equipment specified in the plans costing over \$10,000. The Department will fund the purchase of equipment only after the Contractor documents items 2, 3, 4, and 5 have been addressed and receives approval from the Department.

8. The Contractor shall monitor the collection of the yard waste during the term of the contract, and shall determine the amount of waste collected on a monthly basis.

9. The Contractor shall maintain information on the methodology employed in the composting of the yard waste during the term of the contract. The composting material must be monitored for temperature, percent moisture content, volume collected. The ambient temperature must be monitored. The permit will specify the frequency of this monitoring.

10. The Contractor shall test the final compost for percent total solids, oxygen consumption rate, total organic carbon, nitrogen (TKN), lignin, and cellulose.

11. The Contractor shall submit monthly reports on the Project. The reports shall discuss the status of the project and the information collected in items 8, 9, and 10.

12. The Contractor shall develop a pictorial history via slides of the Project complete with data on project development from early initiation, start-up, to completion necessary for

presentation of the Project at Waste Management Conferences, trade journals, and other sources to disseminate the results of the Project. The Contractor shall conduct at least one media-notified open house after the Project is operational and shall encourage visits at other times on a scheduled basis.

13. The Contractor shall submit a final report on the Project. The final report shall include:

- 1) An evaluation of the public education and marketing strategy.
- 2) A summary of the volume of waste collected at the composting site.
- 3) A summary of all methodology involved in the collection, transportation, and composting of the waste.
- 4) A summary of the laboratory analysis performed on the finished compost.
- 5) A summary of the markets used for the finished compost.
- 6) A summary of the environmental impact of the Project.
- 7) A description of the collection or incentive plan implemented with the Project.
- 8) An assessment of the viability of conducting this type of project in other communities, counties, and regions of the State of Iowa.

Budget

	Grant	Match
Labor		15,177
Collection		6,970
Bags	50,000	27,300
Educ. Promo.		1,000
Total	\$50,000	\$50,447

SCOPE OF WORK - CITY OF GRINNELL

1. The Contractor shall conduct a yard and leaf waste collection program in the City of Grinnell from July 1, 1990 to June 30, 1991 using biodegradable plastic bags. The Contractor shall also

demonstrate the composting of yard waste collected as outlined in section 5.

2. The Contractor shall establish a public education and marketing strategy to increase citizen participation in the yard waste collection program.

3. The Contractor shall assess the environmental impact the Project will have, both positive and negative.

4. The Contractor shall set forth a proposed method for the actual collection of yard waste or an incentive plan to encourage the collection of yard waste in the City of Grinnell.

5. Methodology

Distribution of the Bags:

Each of the bags shall be used for a two week period in the collection program. The date each type of bag is distributed and collected and transferred to the composting site shall be recorded.

Operation:

One major windrow will be constructed in the experimental portion of the compost area. The windrow may consist of yard waste collected in all types of plastic bags, but each type of bag shall be initially placed in a specified portion of the windrow. The windrow shall consist of yard waste contained in the plastic bags which has been shredded prior to the composting process. One small pile shall be constructed at the site in which bags filled with yard waste shall not be shredded or windrowed.

Sampling

Each windrow will be sampled every two weeks for residue from the plastic bags. Four samples shall be taken from the outside of the windrow and four samples shall be taken from the center of the windrow. These eight samples shall be taken for all types of plastic bags that are used in the project. Samples of the bags shall be taken every two weeks until the composting process is completed for each windrow. The samples shall only contain residue from the plastic bags. The temperature at the center of the windrow shall be recorded when the sampling is done.

6. The Contractor shall submit plans and specifications for the composting operation to the Environmental Protection Division of the Department before construction of the Project begins. No funding will take place before the appropriate permits are obtained.

7. The Contractor shall purchase on a competitive basis the equipment specified in the plans costing over \$10,000. The

Department will fund the purchase of equipment only after the Contractor documents items 2, 3, 4, and 5 have been addressed and receives approval from the Department.

8. The Contractor shall monitor the collection of the yard waste during the term of the contract, and shall determine the amount of waste collected on a monthly basis.

9. The Contractor shall maintain information on the methodology employed in the composting of the yard waste during the term of the contract. The composting material must be monitored for temperature, percent moisture content, volume collected. The ambient temperature must be monitored. The permit will specify the frequency of this monitoring.

10. The Contractor shall test the final compost for percent total solids, oxygen consumption rate, total organic carbon, nitrogen (TKN), lignin, and cellulose.

11. The Contractor shall submit monthly reports on the Project. The reports shall discuss the status of the project and the information collected in items 8, 9, and 10.

12. The Contractor shall develop a pictorial history via slides of the Project complete with data on project development from early initiation, start-up, to completion necessary for presentation of the Project at Waste Management Conferences, trade journals, and other sources to disseminate the results of the Project. The Contractor shall conduct at least one media-notified open house after the Project is operational and shall encourage visits at other times on a scheduled basis.

13. The Contractor shall submit a final report on the Project. The final report shall include:

- 1) An evaluation of the public education and marketing strategy.
- 2) A summary of the volume of waste collected at the composting site.
- 3) A summary of all methodology involved in the collection, transportation, and composting of the waste.
- 4) A summary of the laboratory analysis performed on the finished compost.
- 5) A summary of the markets used for the finished compost.
- 6) A summary of the environmental impact of the Project.
- 7) A description of the collection or incentive plan implemented with the Project.

8) An assessment of the viability of conducting this type of project in other communities, counties, and regions of the State of Iowa.

Budget

	Grant	Match
Personnel	11,130	11,130
Travel	250	250
Supplies	3,450	3,450
Engineering	4,250	4,250
Testing	680	680
Site Prep.	5,000	5,000
Equipment	14,000	14,000
Total	\$38,780	\$38,780

Ms. Hay gave an explanation of each composting project.

Motion was made by Margaret Prah1 to approve the Composting Project Grants to the cities of Dubuque, Grinnell and Carroll as presented. Seconded by Richard Hartsuck. Motion carried unanimously.

PUBLIC PARTICIPATION

Don Balvanz

Don Balvanz, Hardin County Supervisor, distributed a copy of suggested changes to proposed rules for Chapter 101 relating to on-farm waste disposal. Mr. Balvanz stated that he attended a composting meeting in Ames several weeks ago and the topic of conversation during coffee breaks was the burial of farm animals in a landfill. He related that the majority of people do not want to put dead animals in a landfill because the bacteria will grow. He feels that they should be burned because the bacteria will then be destroyed. Mr. Balvanz requested that the Commission allow some sort of burning for dead sheep or hogs if the rendering plant will not take them, and also allow burning of old barns or corn cribs.

FEASIBILITY STUDY FOR IMPROVEMENTS TO THE PUBLIC WATER SUPPLY
SYSTEM, WINTERSET, IOWA

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

On February 1, 1990 the Department of Natural Resources submitted the findings and recommendations of the feasibility study for the improvements to the public water supply system at Winterset, Iowa, to the Governor and General Assembly.

Section 6.1.k of House File 778 allocated \$50,000 of the Department's appropriation to conduct this study. On October 16, 1989 the Commission authorized the awarding of the contract to complete the study to Howard R. Green Co., Cedar Rapids, Iowa.

Findings of the study included:

- * Both the city of Winterset and Madison County are projected to experience a population growth over the next 20 years;

- * The water supply and treatment system serving Winterset will not be capable of meeting the increasing water needs of the city nor will it be capable of providing water to a proposed rural water system serving Madison County;

- * Several options exist for providing water to Winterset and Madison County;

- * The estimated cost to meet the future needs of the city of Winterset and to provide water to Madison County is approximately \$20,000,000.

A copy of the report is provided for your information.

Mr. Stokes distributed copies of the feasibility study and explained same.

Mike Earley asked about the "Ownership of Document" statement towards the front of the report. He questioned whether the consultant has a right to restrict use of the document since it was paid for by the Department, through an appropriation from the legislature.

Director Wilson remarked that that is a good point and it will be checked out with the department's legal staff.

This was an informational item; no action was required.

FINAL RULE--CHAPTER 39, REQUIREMENTS FOR PROPERLY PLUGGING
ABANDONED WELLS

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

The Commission will be requested to approve adoption of new Chapter 39 rules relating to properly plugging abandoned wells.

Four hearings on the proposed new chapter of the rules were held in Cedar Rapids, Denison, Des Moines and Ottumwa on December 11, 12, 13 and 14, 1989; and written and oral comments were received through December 15, 1989. The notice was published on November 15, 1989.

There were a total of 38 attendees at the hearings; 12 at Cedar Rapids, 8 at Denison, 10 at Des Moines and 8 at Ottumwa. Oral comments were made by 16 of the attendees; some commentors also submitted presentations in written comments. Comments were received from a total of 35 commentors on 12 separate topics. The largest number of comments on a single topic were opposed to the requirements for notarizing and recording the well plugging forms. All comments are addressed in the Public Participation Responsiveness Summary included with this agenda item. Copies of this summary will be sent to all hearing attendees and commentors.

Substantive changes included the following:

39.2: Clarification of types of wells covered by the rule.

39.3: Modified or added definitions for; agricultural lime, capped, concrete, crushed stone, rock, gravel and static water level.

39.5(2): Notarizing and recording requirements deleted.

39.8(3) and (4): Added provisions for plugging wells with obstructions or unknown construction details.

39.10(1): Requires a standby well to be repaired.

(Rule is shown on the following 20 pages)

ENVIRONMENTAL PROTECTION COMMISSION [567]
Adopted and Filed

Pursuant to the authority of 1989 Iowa Code Supplement section 455B.190, the Environmental Protection Commission hereby rescinds Chapter 39, and adopts a new Chapter 39, "Requirements for Properly Plugging Abandoned Wells," Iowa Administrative Code.

Existing Chapter 39 was designed to implement Iowa Code section 455B.190, which requires that all abandoned wells be properly plugged in accordance with a closure program implemented by the Department of Natural Resources. However, due to substantial legislative amendments to this Code section by 1989 Iowa Acts, Chapter 286, it is necessary to promulgate a new Chapter 39.

Notice of Intended Action was published in the November 15, 1989 Iowa Administrative Bulletin as ARC 411A. Sixty-five oral and written comments were received from thirty-five commentators, including the Administrative Rules Review Committee, during the comment period and at four public hearings.

Significant changes from the Notice of Intended Action are as follows:

Rule 39.2 is expanded to clarify the types of wells covered and not covered.

In Rule 39.3 the following definitions are modified or added: agricultural lime, capped, concrete, crushed stone, gravel, rock and static water level.

Subrule 39.6(2) deletes the requirement for recording the Affidavit of Well Plugging.

Subrule 39.8(3) adds provisions for plugging wells with obstructions that cannot be removed or with unknown details of construction.

Subrule 39.8(4) adds provisions for plugging wells with obstructions that cannot be removed.

Subrule 39.10(1) adds a requirement for a well in a state of disrepair to be repaired suitable for use prior to being designated as a standby well.

These rules were adopted by the Environmental Protection Commission at its February, 1990 meeting and will become effective on April 25, 1990.

These rules are intended to implement 1989 Iowa Code Supplement section 455B.190.

ITEM 1. Rescind 567-Chapter 39 and insert the following in lieu thereof.

Chapter 39
Requirements For Properly Plugging Abandoned Wells

567--39.1(455B) Purpose. The purpose of this chapter is to implement 1989 Iowa Code Supplement section 455B.190 by providing a schedule and required procedures for the proper plugging of abandoned wells to protect the groundwater by permanently sealing off contamination to individual aquifers.

567--39.2(455B) Applicability. These rules govern the proper plugging of abandoned wells. Some examples of types of wells covered by these rules are those accessing groundwater (withdrawing water from or injecting water into the groundwater) and can include but are not limited to: public and non-public water wells; test wells; observation wells; monitoring wells; agricultural drainage wells; heatpump recirculation wells; and cooling water wells. Some examples of types of wells or subsurface structures not covered by these rules include: small diameter (2" or less) test holes, observation wells or monitoring wells installed for a limited time which can be sealed by withdrawal of the casing and allowing the hole to collapse; soil borings;

septic tanks; underground storage tanks; and cisterns if not used for accessing groundwater. For additional guidance and background information, refer to "Guidelines for Plugging Abandoned Water Wells," Technical Information Series 15, Geological Survey Bureau, Iowa Department of Natural Resources, 1987.

567--39.3(455B) Definitions.

"Abandoned well" means a water well which is no longer in use or which is in such a state of disrepair that continued use for the purpose of accessing water is unsafe or impractical.

"Agricultural lime" means all calcium and magnesium products sold for agricultural purposes in the carbonate form, not including quicklime or hydrated lime, of a size comparable with that of crushed stone, gravel or pea gravel.

"Approved" means accepted or acceptable under an applicable specification stated or cited in these rules.

"Aquifer" means a water-bearing geologic formation capable of yielding a usable quantity of water to a well or spring.

"Bentonite" means a naturally occurring highly plastic, colloidal clay composed largely of the mineral montmorillonite which expands upon wetting.

"Bentonite grout (or slurry)" means a mixture of 10 percent processed bentonite (by weight) and water which is free of contaminants, turbidity and settleable solids.

"Bentonite pellets" means a form of processed bentonite which can be used directly for sealing applications in well plugging operations.

"Bentonite products" means the forms of bentonite which can be used for sealing material in wells, including graded bentonite, bentonite pellets and bentonite grout.

"Capped" means the application of a layer of sealing material at the top of the well casing.

"Casing" means a tubular retaining structure installed in an excavated hole to maintain the well opening.

"Class 1 well" means a well 100 feet or less in depth and 18 inches or more in diameter.

"Class 2 well" means a well more than 100 feet in depth or less than 18 inches in diameter or a bedrock well. Bedrock wells include: (1) wells completed in a single confined aquifer; (2) wells completed in a single unconfined aquifer; and (3) wells completed in multiple aquifers.

"Class 3 well" means a sandpoint well or a well 50 feet or less in depth constructed by joining a screened drive point with lengths of pipe and driving the assembly into a shallow sand and gravel aquifer.

"Concrete" means a mixture of one sack (94 pounds) of portland cement, up to but not exceeding an equal amount by volume of sand and up to but not exceeding an equal amount by volume of gravel or crushed stone and not more than six gallons of water which is free of contaminants, turbidity and settleable solids.

"Confined aquifer" means an aquifer in which the groundwater is under pressure greater than atmospheric pressure. The static water level in a well tapping a confined aquifer rises to a level above the top of the aquifer.

"Crushed stone" means stone (predominantly limestone), crushed and well graded, with 100 percent passing a one-inch sieve, in accordance with the 1984 edition of Iowa Department of Transportation specification No. 4120.04 for Class A crushed stone.

"Department" means the department of natural resources created under Iowa Code section 455A.2.

"Designated agent" means a person other than the state, designated by a county board of supervisors to review and confirm that a well has been properly plugged.

"Director" means the director of the department.

"Filling materials" means agricultural lime, soil, sand, gravel, crushed stone, rock and pea gravel used to occupy space between and below sealing materials in abandoned wells being plugged.

"Frost pit" means a sunken area located directly over or within four feet of a well and used to house the equipment for discharging water from a well into the water system.

"Graded bentonite" means bentonite which is crushed and sized for pouring and easy handling. Like processed bentonite; it swells when hydrated with water and will form a plastic, essentially impermeable mass.

"Gravel" means stone screened from river sand or quarried, with 100 percent passing a 3/4-inch sieve, in accordance with the 1984 edition of the Iowa Department of Transportation specification No. 4120.02 for Class B gravel.

"Groundwater" means any water beneath the surface of the earth.

"Grout" means, for the purposes of this chapter, a fluid mixture of cement and water (neat cement); sand, cement and water (sand cement grout); or bentonite and water (bentonite grout or slurry) of a consistency that can be forced through a pipe and placed as required.

"Limestone" means sedimentary rock which contains greater than 50 percent calcium carbonate and has a strong reaction with hydrochloric acid (HCl).

"Neat cement" means a mixture of one sack (94 pounds) of portland cement to not more than six gallons of water which is free from contaminants, turbidity or settleable solids. Bentonite up to 2 percent by weight of cement may be added to reduce shrinkage.

"Owner" means the titleholder of the land where an abandoned well is located.

"Pea gravel" means gravel sized from one-eighth inch to three-eighths inch in diameter.

"Plug" means the closure of an abandoned well with plugging materials by procedures which will permanently seal the well from contamination by surface drainage and permanently seal off the well from contamination into an aquifer. This involves the proper application of filling and sealing materials.

"Processed bentonite" means bentonite which has been kiln dried and processed into pellets for direct use in well sealing applications or into powder or coarse granules for use in bentonite grout for sealing.

"Registered water well contractor" means a water well contractor registered with the department in accordance with 567--Chapter 37.

"Rock" means stone screened from river sand or quarried, free of debris, foreign matter and any toxic or agricultural chemical residue, up to 2 1/2 inches in diameter.

"Sand" means clean, medium-textured quartz (concrete sand) and shall be at least 25 percent with diameters between 2.0 and 0.25 mm, less than 35 percent with diameters between 0.25 and 0.05 mm and less than five percent with diameters between 0.002 and .05 mm.

"Sand cement grout" means a mixture of one sack (94 pounds) of portland cement, an equal amount by volume of sand and not more than six gallons of water which is free from contaminants, turbidity and settleable solids.

"Sandpoint well" means a small diameter water well constructed by joining a screened drive point with lengths of pipe and driving the assembly into a shallow sand and gravel aquifer.

"Sealing" means the proper placement of sealing materials into an abandoned well to seal off flow into, out of or between aquifers.

"Sealing materials" means bentonite products. Sealing materials may also include neat cement, sand cement grout and concrete.

"Standby well" means a water well which is temporarily taken out of service with the expectation of being returned to service at a future date.

"Static water level" means the water level in a water well or aquifer when the well is not flowing or being pumped; sometimes referred to as the water line. The static water level for an abandoned well is determined just prior to commencing plugging operations.

"Tremie pipe" means a device, usually a small diameter pipe, that carries grouting materials to the bottom of the hole and which allows pressure grouting from the bottom up without introduction of air pockets.

"Unconfined aquifer" means an aquifer in which the static water level does not rise above the top of the aquifer, i.e., the pressure of the water in the aquifer is approximately equal to that of the atmosphere.

"Water well" means an excavation that is drilled, cored, bored, augered, washed, driven, dug, jetted or otherwise constructed for accessing groundwater.

567--39.4(455B) Forms. The following form is currently in use: Abandoned Water Well Plugging Record. 542-1226.

567---39.5(455B) Abandoned well plugging schedule.

39.5(1) Class 1 wells abandoned prior to the effective date of this rule must be properly plugged by July 1, 1995.

39.5(2) Class 2 and 3 wells abandoned prior to the effective date of this rule must be properly plugged by July 1, 2000.

39.5(3) Wells near contamination sources. All classes of wells abandoned prior to the effective date of this rule and located less than 200 feet from an active well supplying potable water or located less than 660 feet from a point source of potential contamination which may include but is not limited to industrial waste sites; uncontrolled hazardous waste sites; petroleum storage areas; hazardous waste treatment, storage, or disposal areas; agricultural chemical storage areas; animal feedlots; and wastewater treatment facilities, must be properly plugged by July 1, 1993.

39.5(4) Wells abandoned after the effective date of the rule. All classes of wells which are abandoned on or after the effective date of this rule must be properly plugged within 90 days of the date of abandonment.

567--39.6(455B) Abandoned well owner responsibilities.

39.6(1) Plugging requirements. The owner is responsible for insuring the abandoned well is plugged pursuant to this chapter.

39.6(2) Record. It is the responsibility of the owner to certify, on DNR Form 542-1226 "Abandoned Water Well Plugging Record," that an abandoned well has been plugged in accordance with the requirements and time schedule contained in this chapter. This report must include confirmation of the well plugging by the designated agent for the county or a registered water well contractor. Within 30 calendar days of the date the plugging was completed, the owner shall submit to the department a copy of DNR Form 542-1226.

567--39.7(455B) Abandoned well plugging materials.

39.7(1) Sealing materials. Approved sealing materials are bentonite products (graded bentonite, bentonite pellets and bentonite grout), neat cement, sand cement grout and concrete.

39.7(2) Filling materials. Approved filling materials include agricultural lime, soil, sand, pea gravel, gravel and crushed stone. The filling materials shall be free of debris, foreign matter and any toxic or agricultural chemical residue. Filling materials are not required for well plugging.

567--39.8(455B) Abandoned well plugging procedures.

39.8(1) Freedom from obstructions. Abandoned wells must be checked before they are plugged in order to ensure there are no obstructions that may interfere with plugging operations. Drop pipes, check valves, pumps, and other obstructions shall be removed if practical.

39.8(2) Class 1 wells. These wells may be plugged by pouring filling and sealing materials from the top of the well or by using tremie pipes, except for sand cement grout or concrete placed below the static water level, which must be placed by tremie pipe or dump bailer.

Filling materials of sand, gravel, crushed stone, rock, pea gravel or agricultural lime shall be placed up to one foot below the static water level; soils are not permitted below the static water level due to naturally occurring bacteriological, organic and inorganic contaminants. A minimum of one foot of bentonite pellets, graded bentonite or neat cement shall be placed on top of the filling material up to the static water level as a seal. Sand cement grout or concrete applied with a tremie pipe or dump bailer also may be used on top of the filling material up to the static water level and in standing water above the static water level to act as a seal. Filling material may then be added up to four feet below the ground surface.

It is preferable that the filling materials be omitted and that sealing materials be used to fill the entire well up to four feet below the ground surface. Sand cement grout or concrete shall be placed with a tremie pipe or dump bailer when used below the static water level.

The casing pipe and any curbing, frost pipe or pump house structure shall be removed to a depth of four feet below the ground surface and shall be capped by a minimum of one foot of bentonite pellets, graded bentonite, neat cement, sand cement grout or concrete. The cap shall extend six or more inches beyond the outside diameter of the top of the remaining well casing and shall terminate three feet below the ground surface. The remaining three feet (below the ground surface) shall then be backfilled with soil and graded so that surface water is directed away from the abandoned well location.

39.8(3) Class 2 wells other than bedrock wells. If the details of well construction are unknown or obstructions that may interfere with well plugging cannot be removed, the well shall be tremied full of neat cement or bentonite grout up to four feet below the ground surface. If bentonite grout is used from the static water level to the top of the well, it should be capped by neat cement, sand cement grout or concrete terminating four feet below the ground surface.

Filling material consisting of sand, gravel, crushed stone or pea gravel shall be placed in the bottom of the well up to four feet below the static water level. A minimum of four feet of sealing materials consisting of any bentonite products or neat cement shall be added above the filling material up to the original static water level. If bentonite grout or neat cement is used, it shall be placed by tremie pipe. If graded bentonite or bentonite pellets are used, they may be added by pouring in place and agitating to avoid bridging. Sealing materials shall be added above the static water level up to four feet below the ground surface. If bentonite grout is used from the static water level to the top of the well, it should be capped by neat cement, sand cement grout or concrete terminating four feet below the ground surface.

It is preferable that the filling materials be omitted and that sealing materials be used to fill the entire well up to four feet below the ground surface.

Casing pipe and any curbing, frost pit or pump house structure shall be removed to a depth of four feet below the ground surface. The remaining four feet shall then be backfilled with soil and graded so that surface water is directed away from the abandoned well location.

39.8(4) Class 2 bedrock wells. If the details of well construction are unknown or obstructions that may interfere with well plugging cannot be removed, the well shall be tremied full of neat cement or bentonite grout up to four feet below the ground surface. If bentonite grout is used from the static water level to the top of the well, it should be capped by neat cement, sand cement grout or concrete terminating four feet below the ground surface.

The casing pipe and any curbing, frost pit or pump house structure shall be removed to a depth of four feet below the ground surface. The remaining four feet shall then be backfilled with soil and the surface shall then be graded to divert water away from the abandoned well location.

a. Bedrock wells completed in a single confined aquifer. Before proceeding to plug the well, a bridge plug or packer shall be placed at or below the bottom of the casing to stop the flow of water where the pressure in the confined aquifer causes the water to flow from the well to the surface. In such cases, filling materials shall be placed in the lower portion of the well before the bridge plug or packer is set.

Filling material consisting of pea gravel, crushed stone or gravel shall be placed from the bottom of the well up to ten feet below the bottom of the casing or confining layer, whichever is lower. Sealing materials consisting of any bentonite products, sand cement grout or neat cement shall be placed from the top of the filling material to at least ten feet above the bottom of the casing or confining layer or to the static water level, whichever is higher. If bentonite grout, neat cement or sand cement grout is used, it shall be placed by tremie pipe. If bentonite pellets or graded bentonite are used, they shall be added by pouring in place and agitating to avoid bridging. The casing shall then be filled up to four feet below the ground surface with sealing materials. If bentonite grout is used from the static water level to the top of the well, it should be capped by neat cement, sand cement grout or concrete terminating four feet below the ground surface.

It is preferable that the filling materials be omitted and that approved sealing materials be used to fill the entire well up to four feet below the ground surface.

The casing pipe and any curbing, frost pit or pump house structure shall be removed to a depth of four feet below the ground surface. The remaining four feet shall then be backfilled with soil and graded so that surface water is directed away from the abandoned well location.

b. Bedrock wells completed in a single unconfined aquifer. The plugging procedure for these wells is the same as for bedrock wells completed in a single confined aquifer except that a bridge plug or packer is not required to stop the flow of water since this problem will not exist in this type of well.

c. Bedrock wells completed in multiple aquifers. For the lowest aquifer, filling material consisting of pea gravel, crushed stone or gravel shall be placed from the bottom of the well up to ten feet below the bottom of the casing or confining layer, whichever is lower. Neat cement tremied in place shall then be placed as a sealing material on top of the fill and extend upward at least twenty feet. Sealing materials shall then be placed in at least the top ten feet of each subsequent aquifer and extend at least ten feet into the confining layer or casing above. The same type of filling materials

and sealing procedures shall apply for each subsequent aquifer. Filling material may be placed from the top of the uppermost aquifer seal up to the static water level of the well. The casing shall then be filled with approved sealing or filling materials to four feet below the ground surface. If bentonite grout is used from the static water level to the top of the well, it should be capped by neat cement, sand cement grout, or concrete terminating four feet below the ground surface.

It is preferable that the filling materials be omitted and approved sealing materials be used to fill the entire well up to four feet below the ground surface. Sand cement grout or concrete shall be applied with a tremie line or dump bailer when applied below the static water level.

The casing pipe and any curbing, frost pit or pump house structure shall be removed to a depth of four feet below the ground surface. The remaining four feet shall then be backfilled with soil and graded so that surface water is directed away from the abandoned well location.

39.8(5) Class 3 wells. The preferred method of plugging a sandpoint well is to pull the casing and sandpoint out of the ground, allowing the hole to collapse and fill. If the sandpoint and casing cannot be extracted, they shall be tremied full of neat cement or completely sealed with bentonite products.

The casing pipe and any curbing, frost pit or pump house structure shall be removed to a depth of four feet below the ground surface. The remaining four feet shall then be backfilled with soil and graded so that surface water is directed away from the abandoned well location.

567--39.9(455B) Designated agent. A county's board of supervisors shall appoint an individual to be responsible to review and confirm an abandoned well to be properly plugged as required by 567--39.8(455B) and authorized by 1989 Iowa Code Supplement section 455B.190. The designation is effective upon notification to the department by the chairperson of the board of supervisors. This notification will include the identity of the designated agent and the length of appointment. Changes in a designated agent will require new notification by the chairperson to the department.

567--39.10(455B) Designation of standby wells.

39.10(1) Standby wells. A standby well must be disinfected prior to being taken out of use for a long period of time and must be disinfected and, as a minimum, checked for bacteria and nitrates when placed back in service. Disinfection of standby wells shall be done in accordance with AWWA (American Water Works Association) Standard A100. The well must not be subject to contamination by surface drainage or from other causes, and the well casing must be provided with an air-tight cover when the well is not in use. If in a state of disrepair, a well must be repaired so that it will be suitable for use prior to being classified as a standby well.

39.10(2) Caveat. Nothing in these rules shall be construed as exempting public water supply wells from requirements set forth in the environmental protection commission rules, 567--Iowa Administrative Code.

567--39.11(455B) Variances. In accordance with Iowa Code section 455B.181, a variance to these rules may be granted by the department provided sufficient information is submitted in writing to the department to substantiate the need for a variance and to ensure the protection of all aquifers penetrated by the affected well. When satisfactory justification has been submitted to the director demonstrating that a variance to these rules will result in equivalent effectiveness or improved effectiveness, a variance to these rules

may be granted by the director. A denial of a variance may be appealed to the environmental protection commission pursuant to 567--Chapter 7.

These rules are intended to implement 1989 Iowa Code Supplement section 455B.190.

Date

Larry J. Wilson, Director

(A:EP39A.MIN/031-90)

DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

PUBLIC PARTICIPATION RESPONSIVENESS SUMMARY

FOR

RULES TO IMPLEMENT 1989 IOWA CODE SUPPLEMENT SECTION 455B.190

CHAPTER 39: REQUIREMENTS FOR PROPERLY PLUGGING ABANDONED WELLS

The attached information constitutes a summary of written and oral comments received on the above proposed new chapter of the rules.

Thirty-five (35) commenters submitted comments concerning the proposed new chapter of the rules. A total of thirty-eight (38) persons attended the four (4) public hearings held.

The following information constitutes a summary of comments received at four (4) statewide public hearings held on December 11, 1989 at Kirkwood Community College, Cedar Rapids; on December 12, 1989 in Denison; on December 13, 1989 in Des Moines; on December 14, 1989 at Ottumwa; and comments received through December 15, 1989 addressed to the department. This responsiveness summary addresses all comments and each comment or group of comments is followed by the name of the commenter or commenters on that subject; a discussion; and a staff recommendation. The interest and input of all commenters is appreciated.

1. Comment: (39.3) There is no size requirement for agricultural lime. Can it be as large as the owner wants?
Commenter: Iowa General Assembly Administrative Rules Review Committee (ARRC).
Discussion: The definition of agricultural lime should be modified to require that it be of a size comparable with that of crushed stone, gravel or pea gravel.
Recommendation: Modify the definition of agricultural lime as described.
2. Comment: (39.3) The lay person may not know what Class B stone means. Can this be deleted or defined?
Commenter: ARRC.
Discussion: Gravel should be better defined so that it can be understood by the lay person. Reference should also be made to IDOT specifications.
Recommendation: Modify the definition of gravel to be "stone screened from river sand or quarried, with 100 percent passing a 3/4-inch sieve, in accordance with the 1984 edition of the Iowa Department of Transportation specification No. 4120.02 for Class B gravel."
3. Comment: (39.3) When is the static water level determined? Do fluctuations thereafter affect plugging?
Commenter: ARRC.
Discussion: The static water level is to be determined just prior to commencing well plugging, and this should be stated in the rule. Proper plugging will not be adversely affected by subsequent water level fluctuations.
Recommendation: Modify the definition of static water level to indicate it is to be determined just prior to commencing well plugging.
4. Comment: (39.8(1)) Who decides whether it is practical to remove obstructions before plugging a well? The owner may decide it is not practical, but a well driller may say it is.

Commenter: ARRC.

Discussion: Field judgement is needed to determine if it is practical to remove obstructions from an abandoned well. The designated agent of the county or a registered water well contractor must confirm proper plugging of a well, so it is expected that their concurrence would be needed on whether or not it was practical to remove obstructions.

Recommendation: No change.

5. Comment: The rules need something which allows the owner to repair a well rather than plug it if that is desired.
(39.2)

Commenter: ARRC.

Discussion: If a well is repaired and returned to service it is no longer an abandoned well subject to plugging. A well can be repaired and kept as a standby well in accordance with section 39.10, and this should be clarified.

Recommendation: Add wording to indicate that a well must be repaired so that it will be suitable for use prior to being classified as a standby well.

6. Comment: In both the title of the Chapter and throughout the document the term "abandoned well" is used. This term is generally used within EPA and industry to describe any well that was abandoned and not just water wells as the definition of abandoned well stipulates. Since the Chapter has been revised to only include abandoned water wells and not other wells that might be abandoned, EPA recommends changes to the Chapter and to the definitions to reflect what the law appears to now be intended to do, plug abandoned water wells and not all abandoned wells. To accomplish this I would suggest the use of the term "water well" in place of the word "well" in the areas mentioned above.
(39.2)

Since the Chapter has eliminated all other types of wells that occur within the state at this time, will there be subsequent revisions to the Chapter to handle plugging and abandonment of these other wells or would well owners be required to follow EPA-set guidelines for plugging and abandonment? EPA asks these questions since EPA has direct authority of injection wells (i.e., heat pump reinjection wells and agricultural drainage wells) in Iowa and if these wells were to be abandoned they would not be covered under Chapter 39 as it is currently proposed unless the definition of "water well" was taken in a broad sense to say that injection into groundwater is accessing groundwater.

Commenter: Ralph Langemeier, Chief, Drinking Water Branch, Water Management Division, Region VII, U.S. Environmental Protection Agency (EPA), Kansas City, Kansas.

Discussion: Protection of the groundwater by properly plugging abandoned wells was the intent of the rule. The Iowa Code definition of an abandoned well was used, which refers to "accessing" groundwater. In our opinion the term "accessing" means withdrawing water from or injecting water into the groundwater, but this is not clearly spelled out in the rule. This should be clarified, and examples should be given of types of wells covered and not covered by these rules. This can best be done by an expansion of section 39.2 on Applicability. Subsequent revisions to Chapter 39 are not anticipated.

Although EPA may have authority for such things as agricultural drainage wells, DNR also has responsibilities in these areas under state law. Because we have not secured delegation of a federal program does not mean we do not have authority.

Recommendation: Expand section 39.2 to further define the intended meaning of abandoned wells, and include examples of the types of wells covered and not covered by the rule.

7. Comment: The commenter questioned whether cisterns were covered (39.2) under this new chapter.

Commenter: Dan Spurgeon, Spurgeon's Trenching, Ottumwa, Iowa.

Discussion: Cisterns are generally not considered water wells and abandoned cisterns are not covered under this chapter unless accessing groundwater. This should be clarified in the rule. It is prudent to fill abandoned cisterns to eliminate them as health and safety hazards, but they are not included in the abandoned well plugging program unless used as wells.

Recommendation: Include a reference to cisterns in section 39.2 to indicate they are not considered abandoned wells unless they are accessing groundwater.

8. Comments: The commenters suggested that definitions be revised for (39.3) "agricultural lime," "concrete," "crushed stone," "gravel" and "static water level," and that definitions be added for "capped" and "stone."

The commenters expressed concern for the definition of abandoned wells, relating mostly to the period of time out of use that should be considered in classifying a well as abandoned. It was stated that due to drought conditions some wells not used for ten years have been

returned to service. Also, an additional category of "temporary abandoned well" was suggested.

Commenters: Loren M. Griener, Palo Alto County Sanitarian; Ron Fairchild, Winneshiek County Sanitarian; Dean Geltner, Wapello County Supervisor; and Daniel A. Lindquist and William R. Nickolas, Soil Conservation Division, Iowa Department of Agriculture and Land Stewardship.

Discussion: It is agreed that revised or new definitions should be provided for the words listed.

The Iowa Code definition for an abandoned well was used, and does not provide for a time period during which the well is no longer in use, but presumes it is not planned to use such a well again or the well is in such a state of disrepair that continued use is unsafe or impractical. The standby well category is provided for wells taken out of service temporarily with the expectation of being returned to service at a future date. The word "temporarily" was intentionally not further defined because of the wide variations in time periods out of use expected due to varying needs and circumstances. A standby well is not considered an abandoned well and must meet the criteria in section 39.10. A temporary abandoned category would not be appropriate, as this would fall in the same category as a standby well and would be required to meet the same criteria.

Recommendation: Revise the definitions for "agricultural lime," "concrete," "crushed stone," "gravel" and "static water level," and provide definitions for "capped" and "stone."

9. Comment: The commenter stated that the well plugging deadlines (39.5) were too far in the future, and that earlier deadlines should apply for wells abandoned after November, 1988.

Commenters: Ron J. Osterholm, Cerro Gordo County Health Officer.

Discussion: There was strong sentiment against the original deadlines for well plugging; it was felt they were not feasible and could not be met with the available resources. The legislature suggested that the deadline be extended to the year 2000.

The intention was to provide for properly plugging all abandoned wells, some of which date back many years, and to keep well plugging current on wells abandoned after the effective date of the rule.

Recommendation: No change.

10. Comments: It was suggested that guidelines be provided for what constitutes petroleum storage areas, agricultural storage areas, feedlots and wastewater treatment facilities. Further, it was asked why the minimum distances in this section are not the same as those required for construction of new non-public wells.

Commenters: Christopher A. Wightman, Scott County Sanitarian, and Lawrence E. Barker, Administrator, Scott County Health Department.

Discussion: The contamination sources listed are generic, not specific, in nature, and are provided for general guidance. Contamination of abandoned wells from such sources is dependent on factors in addition to proximity such as concentration of pollutants, soil conditions and groundwater flow, and it is difficult to assess the influence of each. Individual sites may require special consideration, but the goal of minimizing contamination of groundwater by abandoned wells should be kept uppermost in mind.

Depending upon the geology and other factors such as limited available area, active wells are sometimes located closer than 200' to each other. However, when a well is abandoned it can become a potential source of contamination if located too close to an active well, and as such it is assigned a high priority for plugging. No requirements for minimum separation distance of an abandoned well from an on-site wastewater treatment facility is included in Chapter 39.

Recommendation: No change.

11. Comments: It was felt by many commenters that requiring notarizing and recording of the Abandoned Water Well Plugging Record was an unnecessary step that would increase the work load of the sanitarians, discourage owners of abandoned wells from complying with the plugging program, add extra time and expense to the process and would serve no useful purpose. Better voluntary compliance from well owners could be expected if too many restrictions such as these were not placed on them. It was asked if the well owner was responsible for sending a copy of the form to DNR. One comment stated there seemed to be a conflict between sections 39.6(2) and 39.9.

Comments were also submitted pertaining to the requirement for confirmation of plugging by the designated agent of the county. It was claimed that the agent would have to be present during plugging to certify the procedure, and could not afford to do this, and therefore would not be able to certify. An opinion was expressed that the state should provide 100 percent

funding to the counties for the costs of the program, and that the state should inspect and certify the plugging. Some felt that registered water well contractors would be best qualified and should be required to do most of the well plugging. There was a comment that owners should not have to report the plugging of sandpoint wells.

Commenters:

Richard Madsen, Ida County Sanitarian; Loren M. Griener, Palo Alto County Sanitarian; Larry E. Jontz, Jasper County Board of Health Representative; David N. Irwin, Sac County Sanitarian; Marilee Monroe, Floyd County Recorder; William H. Stemple, Wapello County Well Program Administrator; Dan Spurgeon, Spurgeon Trenching and Bernard Shaw, Shaw Trenching both of Ottumwa, Iowa; Lawrence J. Lerdahl, Humboldt County Sanitarian; Ronald J. Osterholm, Cerro Gordo County Health Officer; Thomas B. Anderson, P.E., Howard County Engineer/Sanitarian; Michael W. Mahr, Chairman, and Mr. Robert Freel, Co-Chairman, Howard County Board of Supervisors; Lyle F. Jackson, Fayette County Sanitarian; J.R. Smith, Scott County Sanitarian, and Lawrence E. Barker, Administrator, Scott County Health Department; Ron Fairchild, Winneshiek County Sanitarian; and Steven R. Helfer, Clayton County Sanitarian.

Discussion:

It is agreed that notarizing and recording are unnecessary steps which should be deleted from the rule.

It is the responsibility of the well owner, as described in section 39.6(2), to send a certified copy of Form 542-1226 to DNR. Confirmation of the well plugging must be done by the designated agent for the county or a registered water well contractor as stated in section 39.6(2). Section 39.9 requires the county to appoint a designated agent. There does not appear to be a conflict in duties or responsibilities between these two sections.

Legislative action added the requirement for the use of a designated agent of the county or a registered water well contractor for confirmation of proper plugging of abandoned wells. The legislature also established the funding for the well plugging grant program. Action by the legislature would be needed to change these rule provisions and increase the program funding. A county could supplement its funding for the well plugging by imposing inspection fees for time spent by county personnel on each project. The legislation also included sandpoint wells in the plugging program.

Recommendation: Delete the requirements for notarizing and recording Form 542-1226 from the rule.

12. Comments:
(39.8)

It was suggested that a registered water well contractor be required to plug Class 2 wells with approved sealing materials if all obstructions could not be removed; that sealing materials alone would be cost prohibitive for Class 1 wells, and that plugging requirements should be given for Class 2 wells if the details of well construction are unknown. Also, it was asked whether frost pits must always be properly removed or could sometimes be retained for other uses.

Commenters:

J.R. Smith, Scott County Sanitarian, and Lawrence E. Barker, Administrator, Scott County Health Department; Larry E. Jontz, Jasper County Board of Health Representative; and Daniel A. Lindquist and William R. Nickolas, Soil Conservation Division, Iowa Department of Agriculture and Land Stewardship.

Discussion:

The legislation is intended to allow owners to plug their own wells, with certification of plugging by others. Requiring the use of a registered water well contractor cannot be included in the rule because it would circumvent the legislative intent, though it could be adopted as a county requirement. Well owners plugging their own wells should obtain proper guidance and assistance as needed, especially when unforeseen difficulties arise such as those described. Otherwise, the well owner may become subject to penalties if unable to obtain confirmation of proper plugging.

We agree that further guidance is needed in the rule concerning plugging Class 2 wells if all obstructions cannot be removed or if the details of well construction are unknown.

The method using sealing materials only for Class 1 wells is included as an alternate and is not required.

A proposal to not follow the rules in regard to removal of casing pipe, curbing, frost pit or pump house structure would be considered a variance from the rules and could be applied for under section 39.11.

Recommendation:

Add to sections 39.8(3) and 39.8(4) requirements for plugging wells with obstructions which cannot be removed that may interfere with well plugging or if the details of well construction are unknown.

13. Comments:
(39.9)

The rules do not clearly identify who is to enforce them, nor provide guidelines on the qualifications of the designated agent.

Section 39.9 states that the Board of Supervisors shall appoint someone responsible for confirming that wells have been properly plugged. If it is mandatory that counties provide this service, it would amount to the

department mandating county action without funding. The county could in many cases incur costs far in excess of the overhead costs allowed by the grant program.

Commenters: Richard Madsen, Ida County Sanitarian; and David Manning, Jackson County Sanitarian.

Discussion: Primary enforcement of the rules will rest with DNR, but counties in the grant program are expected to carry out the rules in accordance with the agreements into which they have entered.

It was felt that the counties should not be unduly restricted in their selection of a designated agent by guidelines which in many cases might be difficult to meet. This is a new program which is experiencing widespread participation by the counties, and there is no desire to make it so restrictive that such participation would not be forthcoming. County sanitarians are usually appointed as the designated agents, and they are proving to be dedicated and conscientious in carrying out the intent of the rules.

Confirmation of the well plugging can be by the designated agent for the county or a registered water well contractor. If confirmation is provided by a registered water well contractor this would not have to be repeated by the designated agent. The action by the legislature did make the appointment of a designated agent by the county mandatory. Partial funding to help defray administrative costs is available through the grant program. Any increase in funding availability to the counties would have to result from further action by the legislature. The county is free to adopt regulations more strict than those of Chapter 39, and these could include a requirement for wells to be plugged only by registered water well contractors and the assessment of fees by the county for services rendered in connection with well plugging.

14. Comments: One commenter raised questions pertaining to the water sample tests required for standby wells; who was to take (39.10) and pay for the test, to whom the results would be reported, whether the county would be informed and what was to be done if the test results were unsatisfactory.

Another comment pertained to whether it was required to bring standby wells up to code under these rules.

Commenters: Richard Madsen, Ida County Sanitarian; and J.R. Smith, Scott county Sanitarian, and Lawrence E. Barker, Administrator, Scott County Health Department.

Discussion: It is the responsibility of the owner to take and pay for tests when placing standby wells back in service.

The tests are for the benefit of the owner, and test results would be reported to him.

It is expected that the owner would like to know whether or not the water from the well would be safe for consumption. The county could adopt regulations requiring the reporting of the test results to the county if desired.

Standby wells should be brought up to code, just as with all other wells. However, the only requirements for standby wells in this section pertain to disinfection, testing for bacteria and nitrates, protection against contamination and an air-tight cover. It should be clarified that a well in disrepair must be repaired to qualify as a standby well.

Recommendation: Add a requirement that a well in disrepair must be repaired so that it will be suitable for use prior to being classified as a standby well.

15. Comments: Several commenters suggested that the instructions (Form 542-1226) should state that the designated agent of the county should be notified prior to commencing well plugging operations.

It was asked how multiple wells could be listed on the form and identified.

The comment was made that required separation distances from septic tanks were not given on the form.

Several commenters questioned the need for notarizing and recording the form.

Several commenters suggested that space for more detailed location descriptions would be helpful, and one suggested that the township name and tier number should be given.

It was also suggested that a copy of the form be given to the county.

Commenters: Richard Madsen, Ida County Sanitarian; Loren M. Griener, Palo Alto County Sanitarian; Carolyn Garrett, Wapello County Recorder; Dave Constant, Pollution Control Systems, Cedar Rapids, Iowa; Jim Ulveling, Director, Carroll, Crawford and Audubon County Health Departments; Christopher A. Wightman, Scott County Sanitarian; Lawrence E. Barker, Administrator, Scott County Health Department; Thomas B. Anderson, P.E., Howard County Engineer/Sanitarian; Michael W. Mahr, Chairman, and Robert Freel, Co-Chairman, Howard County Board of Supervisors; and David N. Irwin, Sac County Sanitarian.

Discussion:

We agree with the suggestion that the well owner be required to contact the designated agent of the county prior to proceeding with well plugging. The county could require submittal of a copy of the form to the county; all counties might not want this procedure followed, so it should be left to the discretion of each county.

Multiple wells should not be reported on the report of well plugging; one form should be used for each well. The location of the abandoned well should be adequately described to distinguish it from nearby wells, either active or abandoned.

The chapters of the rules pertaining to construction of public and non-public water wells include requirements for minimum separation distances from sources of contamination including septic systems. It would not be appropriate to include further references to septic systems on this form.

It was recommended in Comment No. 11 that the requirements for notarizing and recording be deleted from section 39.6(2), and if this is done it will also apply to the form.

The township number is adequate for the legal description; the township name is not needed, nor is the tier number. More complete legal descriptions are not needed by DNR, but would be desirable for some who use the form for reference or information. The form should be modified as suggested to provide space for a more complete location description. Addition of well plugging information to the groundwater hazard statement might be considered in the future.

Recommendations: Add a requirement for the owner to notify the designated agent of the county prior to commencing well plugging operations on Form 542-1226.

Delete the requirements for notarization and recording of the form.

Modify the form to provide space for a more detailed location description.

16. Comments:
(General)

Commenters expressed strong support for the well plugging program and the proposed new rules. It was indicated that the rules are excellent and have good definitions, and that they are practical, reasonable, workable and adequate to accomplish safe plugging of wells. It was stated that the vast majority of farmers have been very understanding and supportive of these procedures. Support was indicated for the schedule of deadlines for well plugging.

Average costs for well plugging in several counties varied from less than \$100 to \$325 per well, and the average number of wells plugged was reported as high as 80 per county.

There was a suggestion that disinfection be required for all wells being plugged.

One commenter asked when the well plugging program would end.

Another commenter submitted copies of guidance material used by their firm, which is in the business of plugging wells.

Still another thought there should be no restrictions on the types of filling materials.

Commenters:

Richard Madsen, Ida County Sanitarian; Loren M. Griener, Palo Alto County Sanitarian; Stan Rooker, Sanitarian, city of Ottumwa; Leo Gruwell, Wapello County Sanitarian; Jim Ulveling, Director, Carroll, Crawford and Audubon County Health Departments; Stephen W. Patterson, Guthrie County Sanitarian; J.R. Smith, Scott County Sanitarian, and Lawrence E. Barker, Administrator, Scott County Health Department; Lyle F. Jackson, Fayette County Sanitarian; Robert A. Gage, Gage & Gage Plumbing & Heating, West Union, Iowa; Ted O. Yanecek, Public Affairs Council, Iowa Farm Bureau Federation; Jane-Marie Henke, Legislative Information Coordinator and Terry L. Peterson, Director of Legislative Affairs, Waste Management of North America, Inc., Westchester, Illinois; and Lawrence J. Lerdahl, Humboldt County Sanitarian.

Discussion:

The comments and support of the program are appreciated.

It was the consensus of the advisory group on development of this chapter that disinfection of abandoned wells to be plugged was ineffectual and an unnecessary expense. It was felt that the disinfection would have little effect on the aquifer, and once the well was properly plugged it would no longer be a source of contamination to the aquifer.

There is no scheduled end to the well plugging program; the grant program was authorized and funded for five years. There are penalties for non-compliance to aid in the enforcement of the plugging program.

Appreciation is expressed for the material on well plugging methods submitted. It does not appear to contain suggestions for changes in Chapter 39.

An effort was made to allow a variety of suitable filling materials including agricultural lime and soil where appropriate. Restrictions on filling and sealing materials and plugging methods apply where it is deemed necessary to accomplish effective well plugging.

Recommendation: No change.

Mr. Stokes explained the rules as well as changes which were made as a result of public comment.

Margaret Prah1 asked about the meaning of "suitable for use" on page 7, last sentence under 39.10(1).

Mr. Stokes stated that the intent is that it meet the requirements of a water well which would refer back to the rules on construction and maintenance of private wells.

Discussion followed regarding how it is certified when a well is plugged, and the time deadline for closing wells.

Motion was made by Margaret Prah1 to approve Final Rule--Chapter 39, Requirements for Properly Plugging Abandoned Wells, with the exception that section 39.10(1) be amended so that the last sentence in the paragraph refers to the standards for private water well construction found in Chapter 38 of the Iowa Administrative Code, substituting a reference to that section to the words "it will be suitable for use." Seconded by Mike Earley.

Mrs. Prah1 clarified that the last sentence in 39.10(1) would then read: If in a state of disrepair, a well must be repaired so that it complies with the standards for private well construction found in Chapter 38 of the Iowa Administrative Code prior to being classified as a standby well.

Mr. Stokes referred to Chapter 49 to achieve the changes Commissioner Prah1 desires.

Gary Priebe stated that if he had an old well he watered cattle out of occasionally, he wouldn't want to be required to have it in the same repair or standards as the one that is used for human drinking water.

Gary Priebe offered a friendly amendment to change the wording of the last sentence in 39.10(1) so that it reads: If in a state of disrepair, a well must be repaired so that there is no degradation of the groundwater so it will be suitable for use prior to being classified as a standby well.

Margaret Prah1 agreed to the amendment and Mike Earley concurred.

Vote on Margaret Prah1's motion as amended carried unanimously.

PROPOSED RULE--CHAPTERS 40, 41, AND 43, PUBLIC WATER SUPPLY
MONITORING AND SURFACE WATER FILTRATION AND DISINFECTANT

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

The Department is proposing modification of existing Chapters 40 and 41 and a new Chapter 43 to incorporate the U.S. EPA regulations on total coliform bacteria (including fecal coliforms and e. coli) and filtration and disinfection of surface water supplies (including turbidity, giardia lamblia, viruses, and heterotrophic bacteria).

These rules amend current rules including the maximum contaminant level, monitoring requirements, and analytical requirements for total coliform bacteria. They also establish monitoring requirements for surface water (groundwater directly influenced by surface water), criteria to determine when filtration and disinfection are required and to demonstrate that they are providing adequate treatment.

The major change in the coliform bacterial rule is that the maximum contaminant level is based on presence/absence instead of an estimated coliform density. If a positive sample is identified, an evaluation for fecal coliform or e. coli is now required as a follow up instead of just coliform sampling. In addition, a positive sample requires four recheck samples the same month and a minimum of five samples the following month compared to the current three recheck samples and a routine sample frequency that may be as few as one sample in a calendar quarter. Also, each system must have a state approved sample site/location plan. Finally, a minimum of five samples per month are required for all systems, unless a sanitary survey is conducted every five years, compared to the current non community system monitoring requirement of one sample per calendar quarter.

The Commission will be asked to approve the Notice of Intended Action at their March Commission meeting.

Chapter 41 - Synopsis of Coliform Rule Changes

Briefly the new rules make the following changes to the existing rules:

1. The method/criteria to determine if a maximum contaminant violation (MCL) occurred was revised;

- The old rule generally permitted not more than 5 to 10% positive and was based on number of organisms present, the analytical method used and the number of samples taken.
- The new rule is based on presence or absences and shall not exceed 5% or one sample positive if less than 5 samples per month are taken.

2. The monitoring requirements (number of samples/month) and particularly the repeat test requirements were revised to be more statistically sound and therefore potentially detect the low grade contamination problems. Monitoring requirements are generally set based upon the population served and the type of service (community/noncommunity).

- Old procedures required a standard number of samples per month randomly through the system.
- The new rules generally require the same number of samples per month but require the facility to have an approved sampling plan. In those situations where bacteria are detected, the facility is required to resample above and below and at the site in the distribution where the bacteria were originally detected. The next month they must also take a minimum of five samples.

The new rules require that the department conduct a sanitary survey of all public water supplies on routine basis (every 5 years). If this not accomplished the facility will be required to take a minimum of 5 samples per month. This was not previously addressed in the old rules.

The new rules require additional bacterial monitoring for surface water supplies and ground water supplies under the direct influence of surface water.

The new rules set very narrow guidelines under which repeat testing could be waved or positive results could be discounted (invalidated).

The new rules provides for new technology for testing for coliforms (colilert test) and requires that positive test samples be analyzed for Fecal Coliforms (a more definitive proof of fecal contamination). In those situations where fecal coliforms are detected the incident is defined as a acute violation and the public water supply must make public notice immediately and by the electronic media.

In addition to the significant impact upon the public water supplies, these rules will significantly impact the Water Supply Section of the EPC. Within the central office group additional efforts will be required to implement these rules.

- Special procedure documents will be required for submittal to the EPA for approval.
- Training programs will be required for the field offices, public water supply operators and certified laboratories.
- The increased sampling plans will result in the identification of more public water supplies who are in violation and therefore legal action will be required.
- A significant increase in the number of sanitary surveys conducted by the field offices will be required to circumvent the requirement that the small public water supplies either sample at 5 per month or have a sanitary survey every 5 years.

(00470032)

ENVIRONMENTAL PROTECTION COMMISSION (567)

NOTICE OF INTENDED ACTION

Pursuant to the authority of Iowa Code sections 455B.105 and 455B.173, the Environmental Protection Commission for the Department of Natural Resources gives Notice of Intended Action to amend Chapter 40, "SCOPE OF DIVISION-DEFINITIONS-FORMS-RULES OF PRACTICE" and Chapter 41, "WATER SUPPLIES" Iowa Administrative Code.

These water supply rules pertain to major revision of the coliform bacteria monitoring requirements. The rule changes are proposed due to promulgation of the regulations by EPA which become effective December 31, 1990.

Any interested person may submit suggestions or comments on the proposed rule changes through June --, 1990. Such written materials should be directed to Joe Zerfas, Water Supply Section, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand, Des Moines, Ia. 50319 (Fax #515/281-8995). Persons that have questions may contact Joe Zerfas at 515/281-8473. Persons are also invited to present oral or written comments at the three public hearings to be held.

These rules may have an impact upon small businesses.

Copies of the proposed rules may be obtained from Sarah Detmer, Records Section, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand, Des Moines, Ia. 50319.

Chapter 40

SCOPE OF DIVISION-DEFINITIONS-FORMS-RULES OF PRACTICE

Item 1. Amend rule 567-40.2(455B) by inserting in alphabetical order the following definitions:

40.2 Definitions

"Confluent growth" means a continuous bacterial growth covering the entire filtration area of a membrane filter, or a portion thereof, in which bacterial colonies are not discrete.

"Sanitary survey" means a review and on-site inspection conducted by the department of the water source, facilities, equipment, operation and maintenance and records of a public water supply system for the purpose of evaluating the adequacy of such source, equipment, operation and maintenance for producing and distributing safe drinking water and identifying improvements necessary to maintain or improve drinking water quality.

"Too numerous to count" means that the total number of bacterial colonies exceeds 200 on a 47-mm diameter membrane filter used for coliform detection.

Chapter 41
WATER SUPPLIES

Item 2. Renumber 567-41.2(455B) as 567-41.1(455B) and amend as follows:
567--41.1(455B) ~~Interim p~~ **Primary drinking water regulations.**

41.2(1) Coverage. Rules 41.3(455B) to 41.5(455B) These rules shall apply to each public water supply system, unless the public water supply meets all of the following conditions.

41.2(2) delete

41.2(3) delete

Item 3. Add the new rule 567-41.2(455B) as follows:

567--41.2(455B) Biological maximum contaminant levels and monitoring requirements.

41.2(1) Coliforms, Fecal Coliforms and E. coli

a. **Applicable.** These rules apply to all public water supply systems.

b. **Maximum Contaminant Levels(MCL) for total coliforms, fecal coliforms/E. coli**

(1) The MCL is based on the presence or absence of total coliforms in a sample. The system is in compliance with MCL requirements for total coliform if it meets the following requirements.

1. For a system which collects 40 samples or more per month (sample period), no more than 5.0 percent of the samples collected during a month may be total coliform-positive.

2. For a system which collects less than 40 samples per month (sample period), no more than one sample collected during a month may be total coliform-positive.

(2) Any fecal coliform-positive repeat sample or E. coli-positive repeat sample, or any total coliform-positive repeat sample following a fecal coliform-positive or E. coli-positive routine sample constitutes a violation of the MCL for total coliforms. For purposes of the public notification requirements in 41.5(2)"a"(2), this is a violation that may pose an acute risk to health.

(3) Compliance of a system with the MCL for total coliforms in subparagraphs 1. and 2. of this paragraph is based on each month in which the system is required to monitor for total coliforms.

(4) Results of all routine and repeat samples not invalidated by the department or laboratory must be included in determining compliance with the MCL for total coliforms.

(5) Results of samples required as a result of high turbidity measurements of systems using surface water or groundwater under the direct influence of groundwater required under 41.2(1)"c"(1)6, must be included in determining compliance with the MCL for total coliforms.

c. **Monitoring requirements;**

(1) Routine total coliform monitoring.

1. Public water systems must collect total coliform samples at sites which are representative of water throughout the distribution system according to a written sample siting plan. The plan shall be reviewed or updated by the public water supply every two years and shall be retained on file at the facility. Major elements of the plan shall include but are not limited to a map of the distribution system, notation or a list of routine sample location(s) for each sample period and resample locations for each routine sample. Upon request the plan must be

made available to the department during sanitary surveys and must be revised by the system as directed by the department.

2. The public water system must collect samples at regular time intervals throughout the month, except that a system which uses ground water (except ground water under the direct influence of surface water, as defined in 567-40.2(455B)), and serves 4,900 persons or fewer, may collect all required samples on a single day if they are taken from different sites.

3. **Community water systems;** The monitoring frequency for total coliforms for community water systems and non-community water systems serving schools is based of the population served by the system as listed below, until June 29, 1994. After June 29, 1994 the monitoring frequency for systems serving less than 4,101 persons shall be a minimum of five routine samples per month unless the department determines, after completing sanitary surveys (at intervals not to exceed five years), that the monitoring frequency may continue as listed below. The monitoring frequency for regional water systems shall be as listed in 41.2(1)"c"(1)4 but in no instance less than that required by the population equivalent served.

Total Coliform Monitoring Frequency for Community
Water Systems and Noncommunity Schools

Population served	Minimum number of samples per month
25 to 1,000*.....	1
1,001 to 2,500.....	2
2,501 to 3,300.....	3
3,301 to 4,100.....	4
4,101 to 4,900.....	5
4,901 to 5,800.....	6
5,801 to 6,700.....	7
6,701 to 7,600.....	8
7,601 to 8,500.....	9
8,501 to 12,900.....	10
12,901 to 17,200.....	15
17,201 to 21,500.....	20
21,501 to 25,000.....	25
25,001 to 33,000.....	30
33,001 to 41,000.....	40
41,001 to 50,000.....	50
50,001 to 59,000.....	60
59,001 to 70,000.....	70
70,001 to 83,000.....	80
83,001 to 96,000.....	90
96,001 to 130,000.....	100
130,000 to 220,000.....	120
220,001 to 320,000.....	150
320,001 to 450,000.....	180
450,001 to 600,000.....	210
600,001 to 780,000.....	240
780,001 to 970,000.....	270

* Includes public water systems which have at least 15 service connections, but serve fewer than 25 persons.

4. **Regional water systems.**

The supplier of water for a regional water system as defined in 40.2(455B) shall sample for coliform bacteria at a frequency indicated in the following chart until June 29, 1994, but in no case shall the sampling frequency for a regional water system be less than as set forth in 41.2(1)"c"(1)330 based on the population equivalent served. After June 29, 1994 the monitoring frequency of systems with less than 82 miles of pipe shall be a minimum of five routine samples per month unless the department determines, after completing sanitary surveys (at intervals not exceeding five years), that the monitoring frequency may continue as listed below. The following chart represents sampling frequency per miles of distribution system and is determined by calculating one-half the square root of the miles of pipe.

Total Coliform Monitoring Frequency for
Regional Water Systems

Miles of Pipe	Minimum Number of Samples Per Month
0 - 9	1
10 - 25	2
26 - 49	3
50 - 81	4
82 - 121	5
122 - 169	6
170 - 225	7
226 - 289	8
290 - 361	9
362 - 441	10
442 - 529	11
530 - 625	12
626 - 729	13
730 - 841	14
842 - 961	15
962 - 1,089	16
1,090 - 1,225	17
1,226 - 1,364	18
1,365 - 1,521	19
1,522 - 1,681	20
1,682 - 1,849	21
1,850 - 2,025	22
2,026 - 2,209	23
2,210 - 2,401	24
2,402 - 2,601	25
2,602 - 3,249	28
3,250 - 3,721	30
3,722 - 4,489	33
4,490 - 5,041	35

5. **Non-community water systems;** The monitoring frequency for total coliforms for non-community water system is as follows until June 29, 1999. After June 29, 1999 the minimum number of samples shall be five routine samples per month unless the department determines, after completing sanitary surveys (at intervals not exceeding five years), that the monitoring frequency may continue as listed below.

- (i) A non-community water system using only ground water (except ground water under the direct influence of surface water, as defined in 567-40.2(455B)) and serving 1,000 persons

or fewer must monitor each calendar quarter that the system provides water to the public. Systems serving more than 1,000 persons during any month must monitor at the same frequency as a like-sized community water system, as specified in 41.2(1)"c"(1)3.

(ii) A non-community water system using surface water, in total or in part, must monitor at the same frequency as a like-sized community water system, as specified in 41.2(1)"c"(1)3, regardless of the number of persons it serves.

(iii) A non-community water system using ground water under the direct influence of surface water, as defined in 567-40.2(455B), must monitor at the same frequency as a like-sized community water system, as specified in 41.2(1)"c"(1)3. The system must begin monitoring at this frequency beginning six months after the department determines that the ground water is under the direct influence of surface water.

(iv) A non-community water system serving schools must monitor at the frequency as a like-sized community water system, as specified in 41.2(1)"c"(1)3.

5. If the department, on the basis of a sanitary survey determines that some greater frequency of monitoring is more appropriate, that frequency shall be the frequency required under these regulations. This frequency shall be confirmed or changed on the basis of subsequent surveys.

6. A public water system that uses surface water or ground water under the direct influence of surface water, as defined in 567-40.2(455B), and does not practice filtration in compliance with 43.6(1) must collect at least one sample near the first service connection each day the turbidity level of the source water, measured as specified in 43.6(5)"a"(4), exceeds 1 NTU. "Near the first service connection" means at one of the 20 percent of all service connections in the entire system that are nearest the water supply treatment facility, as measured by water transport time within the distribution system. This sample must be analyzed for the presence of total coliforms. When one or more turbidity measurements in any day exceed 1 NTU, the system must collect this coliform sample within 24 hours of the first exceedance, unless the department determines that the system, for logistical reasons outside the system's control, cannot have the sample analyzed within 30 hours of collection. In those situations involving logistical reasons, the public water system must report the occurrence to the department no later than the end of the next business after the occurrence and initiate any sampling directed by the department. Sample results from this coliform monitoring must be included in determining compliance with the MCL for total coliforms in 41.2(1)"b".

6. Special purpose samples, such as those taken to determine whether disinfection practices are sufficient following pipe placement, replacement, or repair, shall not be used to determine compliance with the MCL for total coliforms in 41.2"b". Repeat samples taken pursuant to 41.2"c"(2) are not considered special purpose samples, and must be used to determine compliance with the MCL for total coliforms in 41.2"b".

(2) Repeat total coliform monitoring.

1. Repeat sample time limit and numbers. If a routine sample is total coliform-positive, the public water system must collect a set of repeat samples within 24 hours of being notified of the positive result and in no case more than 24 hours after being notified by the department. A system which collects more than one routine sample per month must collect no fewer than three repeat samples for each total coliform-positive sample found. A system which collects one routine sample per month or fewer must collect no fewer than four repeat samples for each total coliform-positive sample found. The department may extend the 24-hour limit on a case-by-case basis if the system has a logistical problem in collecting the repeat samples within 24 hours that is beyond its control. In those cases, the public water system must report the circumstances to the department no later than the end of the next business after receiving the notice

to repeat sample and initiate the action directed by the department. In the case of an extension, the department will specify how much time the system has to collect the repeat samples.

2. Repeat sample locations(s). The system must collect at least one repeat sample from the sampling tap where the original total coliform-positive sample was taken, and at least one repeat sample at a tap within five service connections upstream and at least one repeat sample at a tap within five service connections downstream of the original sampling site. If a total coliform-positive sample is at the end of the distribution system, or at the first or last service connection, the system will be required to collect the repeat samples from the original sampling site and locations only upstream or downstream.

3. The system must collect all repeat samples on the same day, except that the department may allow a system with a single service connection to collect the required set of repeat samples over a four-day period. "System with a single service connection" means a system which supplies drinking water to consumers via a single service line.

4. Additional repeat sampling. If one or more repeat samples in the set is total coliform-positive, the public water system must collect an additional set of repeat samples in the manner specified in this subparagraph. The system must repeat this process until either total coliforms are not detected in one complete set of repeat samples or the system determines that the MCL for total coliforms in 41.2(1)"b" has been exceeded, notifies the department and provides public notification to its users.

5. If a system collecting fewer than five routine samples per month, has one or more total coliform-positive samples and the department does not invalidate the samples(s) under 41.2(1)"c"(3), it must collect at least five routine samples during the next month the system provides water to the public.

The department may waive the requirement to collect five routine samples the next month the system provides water to the public if the department has determined why the sample was total coliform-positive and establishes that the system has corrected the problem or will correct the problem before the end of the next month the system serves water to the public. In this case, the department must document this decision to waive the following month's additional monitoring requirement in writing, have it approved and signed by the supervisor of the water supply section and the department official who recommends such a decision, and make this document available to the EPA and public. The written documentation will generally be provided by the public water supply system in the form of a request and must describe the specific cause of the total coliform-positive sample and what action the system has taken to correct the problem. The department will not waive the requirement to collect five routine samples the next month the system provides water to the public solely on the grounds that all repeat samples are total coliform-negative. Under this paragraph, a system must still take at least one routine sample before the end of the next month it serves water to the public and use it to determine compliance with the MCL for total coliforms in 41.2(1)"b".

7. Results of all routine and repeat samples not invalidated by the department must be included in determining compliance with the MCL for total coliforms in 41.2(1)"b".

(3) Invalidation of total coliform samples. A total coliform-positive sample invalidated under this subparagraph does not count towards meeting the minimum monitoring requirements of this rule, 41.2(1)"c".

1. The department may invalidate a total coliform-positive sample only if one or more of the following conditions are met.

1. The laboratory establishes that improper sample analysis caused the total coliform-positive result. A laboratory must invalidate a total coliform sample (unless total

coliforms are detected) if the sample produces a turbid culture in the absence of gas production using an analytical method where gas formation is examined (e.g., the Multiple-Tube fermentation technique), produces a turbid culture in the absence of an acid reaction in the Presence-Absence (P-A) Coliform Test, or exhibits confluent growth or produces colonies too numerous to count with an analytical method using a membrane filter (e.g., Membrane Filter Technique). If a laboratory invalidates a sample because of such interference, the system must collect another sample from the same location as the original sample within 24 hours of being notified of the interference problem, and have it analyzed for the presence of total coliforms. The system must continue to re-sample within 24 hours and have the samples analyzed until it obtains a valid result. The department may waive the 24-hour time limit on a case-by-case basis.

2. The department, on the basis of the results of repeat samples collected as required by 41.2(1)"c"(2)1-4, determines that the total coliform-positive sample resulted from a domestic or other non-distribution system plumbing problem. Domestic or other non-distribution system plumbing problem" means a coliform contamination problem in a public water system with more than one service connection that is limited to the specific service connection from which the coliform-positive sample was taken. The department will not invalidate a sample on the basis of repeat sample results unless all repeat sample(s) collected at the same tap as the original total coliform-positive sample are also total coliform-positive, and all repeat samples collected within five service connections of the original tap are total coliform-negative (e.g., the department will not invalidate a total coliform-positive sample on the basis of repeat samples if all the repeat samples are total coliform-negative, or if the public water system has only one service connection).

3. The department has substantial grounds to believe that a total coliform-positive result is due to a circumstance or condition which does not reflect water quality in the distribution system. In this case, the system must still collect all repeat samples required under 41.2(1)"c"(2)1-4, and use them to determine compliance with the MCL for total coliforms in 41.2(1)"b". To invalidate a total coliform-positive sample under this paragraph, the decision with the rationale for the decision must be documented in writing, and approved and signed by the supervisor of the water supply section and the department official who recommended the decision. The department must make this document available to EPA and the public. The written documentation generally provided by the public water supply system in the form of a request must state the specific cause of the total coliform-positive sample, and what action the system has taken to correct this problem. The department will not invalidate a total coliform-positive sample solely on the grounds of poor sampling technique or that all repeat samples are total coliform-negative.

(4) Fecal coliforms/*Escherichia coli* (*E. coli*) testing.

1. If any routine or repeat sample is total coliform-positive, the system must analyze that total coliform-positive culture medium to determine if fecal coliforms are present, except that the system may test for *E. coli* in lieu of fecal coliforms.

2. The department may allow a public water system, on a case-by-case basis, to forgo fecal coliform or *E. coli* testing on a total coliform-positive sample if that system assumes that the total coliform-positive sample is fecal coliform-positive or *E. coli*-positive. Accordingly, the system must notify the department as specified in subparagraph (5)1 of this paragraph and meet the provisions of 567-41.5(455B) pertaining to public notification apply.

(5) Public water supplies response to violation.

1. A public water system which has exceeded the MCL for total coliforms in 41.2(1)"b" must report the violation to the Water Supply Section of department by telephone no later than the end

of the next business day after it learns of the violation, and notify the public in accordance with 41.5(2)"a".

2. A public water system which has failed to comply with a coliform monitoring requirement must report the monitoring violation to the department within ten days after the system discovers the violation, and notify the public in accordance with 567-41.5(2)"b".

3. If fecal coliforms or E. coli are detected in a routine or repeat sample, the system must notify the department by telephone by the end of the day when the system is notified of the test result, unless the system is notified of the result after the department office is closed, in which case the system must notify the department before the end of the next business day.

d. Best Available Technology

(1) The U.S. EPA identifies and the department has adopted the following as the best technology, treatment techniques, or other means available for achieving compliance (BAT) with the maximum contaminant level for total coliforms in paragraphs (a) and (b) of this section:

1. Protection of wells from contamination by coliforms by appropriate placement and construction;
2. Maintenance of a disinfectant residual throughout the distribution system;
3. Proper maintenance of the distribution system including appropriate pipe replacement and repair procedures, main flushing programs, proper operation and maintenance of storage tanks and reservoirs, and continual maintenance of a minimum positive water pressure of 20 psig in all parts of the distribution system; and
4. Filtration and/or disinfection of surface water in accordance with Chapter 456--43.6(455B) or disinfection of ground water using strong oxidants such as but not limited to chlorine, chlorine dioxide, or ozone; or

e. Analytical methodology.

(1) The standard sample volume required for total coliform analysis, regardless of analytical method used, is 100 ml.

(2) Public water systems shall determine the presence or absence of total coliforms. A determination of total coliform density is not required.

(3) **Total coliform analyses:** Public water systems must conduct total coliform analyses in accordance with one of the following analytical methods:

1. Multiple-Tube Fermentation (MTF) Technique, as set forth in "Standard Methods", 1985, American Public Health Association et al., 16th edition, Method 908, 908A, and 908B--pp. 870-878, except that 10 fermentation tubes must be used; or Microbiological Methods for Monitoring the Environment, Water and Wastes, U.S. EPA, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268 (EPA-600/8-78-017, December 1978, available from ORD Publications, CERI, U.S. EPA, Cincinnati, Ohio 45268), Part III, Section B.4.1-4.6.4, pp. 114-118 (Most Probable Number Method), except that 10 fermentation tubes must be used; or

2. Membrane Filter (MF) Technique, as set forth in "Standard Methods", 1985, American Public Health Association et al., 16th edition, Method 909, 909A, and 909B--pp. 886-896; or Microbiological Methods for Monitoring the Environment, Water and Wastes, U.S. EPA, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268 (EPA-600/8-78-017, December 1978,

available from ORD Publications, CERL, U.S. EPA, Cincinnati, Ohio 45268), Part III, Section B. 2.1-2.6, pp. 108-112; or

3. Presence-Absence (P-A) Coliform Test, as set forth in "Standard Methods", 1985, American Public Health Association et al., 16th edition, Method 908E-pp. 882-886; or

4. Minimal Medium ONPG-MUG (MMO-MUG) Test, as set forth in the article "National Field Evaluation of a Defined Substrate Method for the Simultaneous Detection of Total Coliforms and Escherichia coli from Drinking Water: Comparison with Presence-Absence Techniques" (Edberg et al.), Applied and Environmental Microbiology, Volume 55, pp. 1003-1008, April 1989. (Note: The MMO-MUG Test is sometimes referred to as the Autoanalysis Colilert System.)

(4) In lieu of the 10-tube MTF Technique specified in 41.2(1)"e"(3)(1), a public water system may use the MTF Technique using either five tubes (20-ml sample portions) or a single culture bottle containing the culture medium for the MTF Technique, i.e., lauryl tryptose broth (formulated as described in "Standard Methods", 1985, American Public Health Association et al., 16th edition, Method 908A-pp. 872), as long as a 100-ml water sample is used in the analysis.

(5) **Fecal coliform analysis:** Public water systems must conduct fecal coliform analysis in accordance with the following procedure. When the MTF Technique of Presence-Absence (P-A) Coliform Test is used to test for total coliforms, shake the lactose-positive presumptive tube or P-A bottle vigorously and transfer the growth with a sterile 3-mm loop or sterile applicator stick into brilliant green lactose bile broth and EC medium to determine the presence of total and fecal coliforms, respectively. For EPA-approved analytical methods which use a membrane filter, remove the membrane containing the total coliform colonies from the substrate with a sterile forceps and carefully curl and insert the membrane into a tube of EC medium. (The laboratory may first remove a small portion of selected colonies for verification.) Gently shake the inoculated EC tubes to insure adequate mixing and incubate in a waterbath at 44.5 (+ or -) 0.2 °C for 24 (+ or -) 2 hours. Gas production of any amount in the inner fermentation tube of the EC medium indicates a positive fecal coliform test. The preparation of EC medium is described in "Standard Methods", 1985, American Public Health Association et al., 16th edition, Method 908C-pp. 879, paragraph 1a. Public water systems need only determine the presence or absence of fecal coliforms; a determination of fecal coliform density is not required.

41.2(2) Giardia - Reserved

41.2(3) Heterotropic - Reserved

41.2(4) Macroscopic Organisms and Algae.

a. **Applicable;** These rules apply to all public water supply systems.

b. **Analytical methodology;** Measurement of the algal cells shall be in accordance with Method 1002F, "Standard Methods," pp. 1024-1029. Such measurement shall be required only when the department determines on the basis of complaints or otherwise that excessive algal cells are present.

c. **MCLs; Maximum Contaminant Levels for Macroscopic organisms and algae** Finished water shall be free of any macroscopic organisms such as plankton, worms, or cysts. The finished water algal cell count shall not exceed 500 organisms per milliliter or ten percent of the total cells found in the raw water, whichever is greater. Compliance with the maximum contaminant level for algal cells is calculated in accordance with 41.2(4)"b".

Item 4. Delete subrule 41.3(4). This subrule has been completely rewritten and the requirements are included within 41.2"c". 41.3(4) is reserved.

Item 5. Delete subrule 41.3(7). Provisions of 41.3(7) are now found within 41.2(4) without material change. Note; the sentence "This rule is intended to implement Iowa Code Section 455B.173" was deleted.

Item 6. Delete subrule 41.4(1). This subrule has been completely rewritten and the requirements are included within 41.2"d". 41.4(1) is reserved.

Item 7. Delete subrule 41.4(10). Provisions of 41.4(10) are now found within 41.2(4) without change. 41.4(10) is reserved.

Item 8. Paragraph 41.5(1)"b" is amended by revising paragraph (b) to read as follows:

(b) Except where a different reporting period is specified in this part, the supplier of water must report to the State within 48 hours the failure to comply with any national primary drinking water regulation (including failure to comply with monitoring requirements) set forth in this part.

Item 9. Paragraph 41.5(1)"b" is amended to add subparagraph "a"(2)3 to read as follows:

3. Violation of the MCL for total coliforms, when fecal coliforms or E. coli are present in the water distribution system, as specified in 41.2(1)"c"(2).

Item 10. Paragraph 41.5(1)"e" is amended to add in alphabetical order subparagraph "e"(5) and "e"(8) to read as follows:

(5) Total coliforms (To be used when there is a violation of 41.2(1)"c"(1), and not a violation of 41.2(1)"c"(2) The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that the presence of total coliforms is a possible health concern. Total coliforms are common in the environment and are generally not harmful themselves. The presence of these bacteria in drinking water, however, generally is a result of a problem with water treatment or the pipes which distribute the water, and indicates that the water may be contaminated with organisms that can cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possibly jaundice, and any associated headaches and fatigue. These symptoms, however, are not just associated with disease-causing organisms in drinking water, but also may be caused by a number of factors other than your drinking water. EPA has set an enforceable drinking water standard for total coliforms to reduce the risk of these adverse health effects. Under this standard, no more than 5.0 percent of the samples collected during a month can contain these bacteria, except that systems collecting fewer than 40 samples/month that have one total coliform-positive sample per month are not violating the standard Drinking water which meets this standard is usually not associated with a health risk from disease-causing bacteria and should be considered safe.

(12) Fecal Coliforms/E. coli (To be used when there is a violation of 41.2(1)"c"(2) or both 41.2(1)"c"(1) and (2). The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that the presence of fecal coliforms or E. coli is a serious health concern. Fecal coliforms and E. coli are generally not harmful themselves, but their presence in drinking water is serious because they usually are associated with sewage or animal wastes. The presence of these bacteria in drinking water is generally a result of a problem with water treatment or the pipes which distribute the water, and indicates that the water may be contaminated with organisms that can cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possibly jaundice, and associated headaches and fatigue. These symptoms, however are not just associated with disease-causing organisms in drinking water, but also may be caused by a number of factors other than your drinking water. EPA has set an enforceable drinking water standard for fecal coliforms and E. coli to reduce the risk of these adverse health effects. Under this standard all drinking water samples must be free of these bacteria. Drinking water which meets this standard is associated with little or none of this risk and should be considered safe. State and local health authorities recommend that consumers take the following precautions: (To be inserted by the public water system, according to instructions from State or local authorities).

A:JZ:HELP/pg

Chapter 43- Synopsis of Filtration Rules

A new chapter is created to consolidated rules pertaining to the general operation of public water supplies into one chapter.

Seven section previously contained within Chapter 41 have been moved to the chapter 43. An additional section (Filtration Rules) was add that directly and significantly effects all public water supplies that use surface water (SW) or ground water influenced by surface water (IGW).

The primary intent of the Filtration rules is to protect the public from exposure to Giardia lamblia (a protoza disease causing organism) and virus of fecal origin.

The department is required to identify all public water supplies that use influenced ground water (IGW) in addition to those already identified as using surface waters.

The new rules require all public water supplies (SW & IGW) to install if not present, provide records and operate both disinfection and filtration systems as part of their water treatment. Note: the department has elected not to adopt EPA options that would permit the public water supply to avoid filtration through a complex procedure numerous monitoring, controlling, reporting and inspection criteria.

The rules require systems to maintain a minimum of 0.3 mg/L free chlorine and redundant or automatic shut-off systems. These requirements are consistent with current departmental policy but beyond those required by the EPA rules.

The rules generally reduce the amount of allowable turbidity (particulate) in the treated water by a factor of 1/2.

The rules require the public water supply to monitor for the amount of total bacteria present in the treated water.

The rules define more extensive monitoring and reporting for the public water supply than current rules require. Approximate twelve pieces of data must be reported to the department on a monthly basis or be retained on file for inspection.

In addition to the significant impact upon the public water supplies, these rules will significantly the Water Supply Section of the EPC. Within the central office group additional efforts will be required to implement these rules.

- Special procedure documents will be required for submittal to the EPA for approval.
- Training programs will be required for the field offices and the public water supply operators.
- These rules will require amendments to data processing

system and DP support for that information required by EPA.

- A significant effort will be required by the central office and the field offices to identify and enforce these rules in those situations involving influenced ground water.

(00470035)

ENVIRONMENTAL PROTECTION COMMISSION (567)

NOTICE OF INTENDED ACTION

Pursuant to the authority of Iowa Code sections 455B.105 and 455B.173, the Environmental Protection Commission for the Department of Natural Resources gives notice of Intended Action to amend Chapter 40, "SCOPE OF DIVISION-DEFINITIONS-FORMS-RULES OF PRACTICE", Chapter 41, "WATER SUPPLIES" Iowa Administrative Code and to create a new Chapter 43, "WATER SUPPLIES - OPERATION".

These "filtration" rules pertain to revision of the existing Chapters 40 and 41 to add definitions, monitoring requirements and standard language for public notification. Additionally Chapter 43 is being created to contain topics relating to public water supplies' operation requirements and include the new monitoring and performance standards for public water supplies using surface water or ground water influenced by surface water. The rule changes are proposed due to promulgation of the same regulations by EPA which become effective December 31, 1990.

Any interested person may submit suggestions or comments on the proposed rule changes through June --, 1990. Such written materials should be directed to Joe Zerfas, Water Supply Section, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand, Des Moines, Ia. 50319 (Fax # 515/281-8995). Persons that have questions may contact Joe Zerfas at 515/281-8473. Persons are also invited to present oral or written comments at three public hearings to be held.

These rules may have an impact upon small businesses.

Copies of the proposed rules may be obtained from Sarah Detmer, Records Section, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand, Des Moines, Ia. 50319.

Chapter 40
SCOPE OF DIVISION-DEFINITIONS-FORMS-RULES OF PRACTICE

Item 1. Amend rule 567-40.2(455B) by inserting in alphabetical order the following definitions;

40.2 Definitions

"Coagulation" means a processing using coagulant chemicals and mixing by which colloidal and suspended materials are destabilized and agglomerated into flocs.

"Conventional filtration treatment" means a series of processes including coagulation, flocculation, sedimentation, and filtration resulting in substantial particulate removal.

"CT" or "CTcalc" is the product of "residual disinfectant concentration" (C) in mg/l determined before or at the first customer, and the corresponding "disinfectant contact time" (T) in minutes, i.e., "C" x "T". If a public water system applies disinfectants at more than one point prior to the first customer, it must be determined the CT of each disinfectant sequence before or at the first customer to determine the total percent inactivation or "total inactivation ratio." In determining the total inactivation ratio, the public water system must determine the residual disinfectant concentration of each disinfection sequence and corresponding contact time before any subsequent disinfection application point(s). "CT 99.9" is the CT value required for 99.9 percent (3-log) inactivation of *Giardia lamblia* cysts. CT 99.9 for a variety of disinfectants and conditions appear in Tables 1.1-1.6, 2.1 and 3.1 of 43.6(5)"b".

CTcalc

CT 99.9

is the inactivation ratio. The sum of the inactivation ratios, or total inactivation ratio shown as

$(S_{\text{summ}}) \frac{(CT_{\text{calc}})}{(CT 99.9)}$

(CT 99.9)

is calculated by adding together the inactivation ratio for each disinfection sequence. A total inactivation ratio equal to or greater than 1.0 is assumed to provide a 3-log inactivation of *Giardia lamblia* cysts.

"Diatomaceous earth filtration" means a process resulting in substantial particulate removal in which (1) a precoat cake of diatomaceous earth filter media is deposited on a support membrane (septum), and (2) while the water is filtered by passing through the cake on the septum, additional filter media known as body feed is continuously added to the feed water to maintain the permeability of the filter cake.

"Direct filtration" means a series of processes including coagulation and filtration but excluding sedimentation resulting in substantial particulate removal.

"Disinfection contact time" ("T" in CT calculations) means the time in minutes that it takes for water to move from the point of disinfection application or the previous point of disinfectant residual measurement to a point before or at the point where residual disinfectant concentration ("C") is measured. Where only one "C" is measure, "T" is the time in minutes that it takes for water to move from the point of disinfectant application to a point before or at where residual disinfectant concentration ("C") is measured. Where more than one "C" is measured, "T" is (a) for the first measurement of "C", the time in minutes that it takes for water to move from the first or only point of disinfectant application to a point before or at the point where the first "C" is measured and (b) for subsequent measurements of "C", the time in minutes that it takes for water to move from the previous "C" measurement point to the "C" measurement point for which the particulate "T" is being calculated. Disinfectant contact time in pipelines must be calculated based on "plug flow" by dividing the internal volume of the pipe by the maximum hourly flow rate through that pipe. Disinfectant contact time within mixing basins and storage reservoirs must be determined by tracer studies or an equivalent demonstration.

"Disinfection" means a process which inactivates pathogenic organisms in water by chemical oxidants or equivalent agents.

"Filtration" means a process for removing particulate matter from water by passage through porous media.

"Flocculation" means a process to enhance agglomeration or collection of smaller floc particles into larger, more easily settleable particles through gentle stirring by hydraulic or mechanical means.

"Ground water under the direct influence of surface water" means any water beneath the surface of the ground with (1) significant occurrence of insects or other macroorganisms, algae, or large-diameter pathogens such as *Giardia lamblia*, or (2) significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH which closely correlate to climatological or surface water conditions. Direct influence must be determined for individual sources in accordance with criteria established by the State. The State determination of direct influence may be based on site-specific measurements of water quality and/or documentation of well construction characteristics and geology with field evaluation.

"Legionella" means a genus of bacteria, some species of which have caused a type of pneumonia called Legionnaires Disease.

"Point of disinfectant application" is the point where the disinfectant is applied and water downstream of that point is not subject to recontamination by surface water runoff.

"Residual disinfectant concentration" ("C" in CT calculations) means the concentration of disinfectant measured in mg/l in a representative sample of water.

"Sedimentation" means a process for removal of solids before filtration by gravity or separation.

"Slow sand filtration" means a process involving passage of raw water through a bed of sand at low velocity (generally less than 0.4 m/h) resulting in substantial particulate removal by physical and biological mechanisms.

"Surface water" means all water which is open to the atmosphere and subject to surface runoff.

"Waterborne disease outbreak" means the significant occurrence of acute infectious illness, epidemiologically associated with the ingestion of water from a public water system which is deficient in treatment, as determined by the appropriate local or State agency.

"Virus" means a virus of fecal origin which is infectious to humans by waterborne transmission.

Item 2. Delete subrules 41.3(3) and 41.4(2). Provisions of these subrules are now found within a new rule 567--41.8(455B) with the addition of the following introductory text and headings.

567--41.8(455B) Physical properties maximum contaminant levels (MCL) and monitoring requirements.

41.8(1) Turbidity.

a. Applicable. Maximum contaminant levels for turbidity. The requirements in this section apply to unfiltered systems until December 30, 1991, unless the department has determined prior to that date, in writing pursuant to 43.6(3), that filtration is required. The requirements in this section apply to filtered systems that the State has determined in writing pursuant to 43.6(3), must install filtration until December 30, 1991, or until filtration is installed, whichever is later.

The maximum contaminant levels for turbidity are applicable to both community and non-community water systems using surface water sources in whole or in part.

b. Maximum Contaminant Levels (MCL) for turbidity.

The maximum contaminant levels for turbidity in drinking water, measured at representative entry point(s) to the distribution system, are:

(1) One turbidity unit (TU), as determined by a monthly average pursuant to 41.8(1)"c", except that five or fewer turbidity units may be allowed if the supplier of water can demonstrate to the department that the higher turbidity does not do any of the following:

1. Interfere with disinfection.
2. Prevent maintenance of an effective disinfectant agent throughout the distribution system;
or
3. Interfere with microbiological determinations.

(2) Five turbidity units based on an average for no more than two consecutive days pursuant to 41.8(1)"c".

c. Monitoring requirements.

(1) Routine turbidity monitoring.

Turbidity sampling and analytical requirements. a. The requirements of this subrule shall apply only to public water supply systems which use water obtained in whole or in part from surface water sources.

1. A supplier of water serving a population or population equivalent of greater than 100,000 persons shall provide a continuous or rotating cycle turbidity monitoring and recording device or take hourly grab samples to determine compliance with 41.8(1)"b".

2. For the purpose of making turbidity measurements to determine compliance with 41.8(1)"b", samples shall be taken by the suppliers of water for both community water systems and noncommunity water systems at a representative entry point(s) to the water distribution system at least once per day, except under the following conditions:

i. Systems required to be monitored under 41.8(1)"c"(1)2; or

ii. Noncommunity systems, upon approval by the department, may be permitted to reduce their sampling frequency if they can demonstrate that no risk to health will result and they are maintaining a continuous chlorine residual as specified in 43.5(2)"a."

1. Repeat monitoring. If the results (other than results monitored under 41.8(1)"c"(1)) of a turbidity analysis indicate that the maximum allowable limit has been exceeded, the sampling and measurement shall be confirmed by resampling as soon as practicable and preferably within one hour. If the repeat sample confirms that the maximum allowable limit has been exceeded, the supplier of water shall report to the department within forty-eight hours. The repeat sample shall be the sample used for the purpose of calculating the monthly average. If the monthly average of the daily samples exceeds the maximum allowable limit, or if the average of two samples taken on consecutive days exceeds 5 TU, the supplier of water shall report to the department and notify the public as directed in 41.5(1) and 41.5(2).

d. BAT'p - reserved

e. Analytical methodology.

All turbidity measurement shall be made by the nephelometric method in accordance with the recommendations set forth in "Standard Methods," pp. 132-134; or "Methods of Chemical Analysis of Water and Wastes," EPA Environmental Monitoring and Support Laboratory, March 1979, Method 180.1--Nephelometric Method. Calibration of the turbidimeter shall be made either by the use of a formazin standard as specified in the cited reference or a styrene divinylbenzene polymer standard (Amco-AEPA-1 Polymer) commercially available from Amco Standards International, Inc., 230 Polaris Avenue, No. C, Mountain View, California 94043.

Item 3. Paragraph 41.5"e" is amended by adding in alphabetical order a new subparagraph of standard language to read as follows:

() Microbiological contaminants (for use when there is a violation of the treatment technique requirements for filtration and disinfection in IAC 567--43.6(455B)). The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that the presence of microbiological contaminants are a health concern at certain levels of exposure. If water is inadequately treated, microbiological contaminants in that water may cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possibly jaundice, and any associated headaches and fatigue. These symptoms, however, are not just associated with disease causing organisms in drinking water, but also may be caused by a number of factors other than your drinking water. EPA has set enforceable requirements for treating drinking water to reduce the risk of these adverse health effects. Treatment such as filtering and disinfecting the water removes or destroys microbiological contaminants. Drinking water which is treated to meet EPA requirements is associated with little to none of this risk and should be considered safe.

Item 4. A new Chapter 567--43(455B) is added to read as follows:

WATER SUPPLIES-OPERATION

567--43.1(455B) General Information

Item 5. Renumber:

41.11 as 43.1 (1) Emergency actions regarding water supplies.

41.15 as 43.1 (2) Prohibition on the use of lead pipes, solder and flux.

41.16 as 43.1 (3) Use of noncentralized treatment devices.

Item 6. Renumber:

41.6 as 567--43.2(455B) Permits to Operate.

41.12 as 567--43.3(455B) Public water supply system construction.

41.13 as 567--43.4(455B) Certification of completion.

41.14 as 567--43.5(455B) Operation and maintenance for public water supplies.

Item 7. Add a new subrule to read as follows:

567--43.6(455B) Filtration and disinfection.

567--43.6(1) Applicable / General Requirements.

a. These regulations pertain to both community and noncommunity public water systems. The regulations establish criteria under which filtration is required as a treatment technique for public water systems supplied by a surface water source and public water systems supplied by a ground water source under the direct influence of surface water. In addition, these rules establish treatment technique requirements in lieu of maximum contaminant levels for the following contaminants: *Giardia lamblia*, viruses, heterotrophic plate count bacteria, *Legionella*, and turbidity. Each public water system with a surface water source or a ground water source under the direct influence of surface water must provide treatment of that source water that complies with these treatment technique requirements. The treatment technique requirements consist of installing and properly operating water treatment processes which reliably achieve:

(1) At least 99.9 percent (3-log) removal and/or inactivation of *Giardia lamblia* cysts between a point where the raw water is not subject to recontamination by surface water runoff and a point downstream before or at the first customer; and

(2) At least 99.99 percent (4-log) removal and/or inactivation of viruses between a point where the raw water is not subject to recontamination by surface water runoff and a point downstream before or at the first customer.

b. A public water system using a surface water source or a ground water source under the direct influence of surface water is considered to be in compliance with the requirements of 43.6(1) if it meets the filtration requirements in 43.6(3) and the disinfection requirements in 43.6(2).

c. Each public water system using a surface water source or a ground water source under the direct influence of surface water must be operated by a certified operator who meets the requirements of IAC 567--81(455B).

43.6(2) Disinfection

All public water systems using surface water or ground water under the direct influence of surface water in whole or in part are required to disinfect. A system that uses a surface water source that provides filtration treatment must provide the disinfection treatment specified in this subrule beginning December 30, 1991. A system that uses a ground water source under the direct influence of surface water and provides filtration treatment must provide disinfection treatment as specified in this subrule by December 30, 1991, or 18 months after the department determines that the ground water source is under the influence of surface water, whichever is later. If the department has determined that filtration is required the system must comply with any interim disinfection requirements the department deems necessary before filtration is installed. Failure to meet any requirement of this section after the applicable date specified in this introductory paragraph is a treatment technique violation.

Disinfection requirements for public water systems which provide filtration. Each public water system that provides filtration treatment must provide disinfection treatment as follows.

a. The disinfection treatment must be sufficient to ensure that the total treatment processes of that system achieve at least 99.9 percent (3-log) inactivation and/or removal of *Giardia lamblia* cysts and at least 99.99 percent (4-log) inactivation and/or removal of viruses, acceptable to the department.

b. The system must include:

(1) redundant, components, including an auxiliary power supply with automatic start-up and alarm to ensure that disinfectant application is maintained continuously while water is being delivered to the distribution system, or

(2) automatic shut-off of delivery of water to the distribution system whenever there is less than 0.3 mg/l of residual disinfectant concentration in the water. If the department determines that automatic shut-off would cause unreasonable risk to health or interfere with fire protection, the system must comply with subparagraph "b"(1) of this paragraph.

c. The residual disinfectant concentration in the water entering the distribution system, measured as specified in 43.6(4)"a"(5) and "b"(2), cannot be less than 0.3 mg/l for more than 4 hours.

d.

(1) The residual disinfectant concentration in the distribution system, measured as total chlorine, combined chlorine, or chlorine dioxide, as specified in 43.6(4)"a"(5) and "b"(3), cannot be undetectable in more than 5 percent of the samples each month, for any two consecutive months that the system serves water to the public. Water in the distribution system with a heterotrophic bacteria concentration less than or equal to 500/ml, measured as heterotrophic plate count (HPC) as specified in 43.6(4)"a"(3), is deemed to have a detectable disinfectant residual for purposes of determining compliance with this requirement. Therefore, the value "V" in the following formula cannot exceed 5 percent in one month, for any two consecutive months.

$$V = \frac{c+d+e}{a+b} \times 100$$

where:

a = number of instances where the residual disinfectant concentration is measured;

b = number of instances where the residual disinfectant concentration is not measured but heterotrophic bacteria plate count (HPC) is measured;

c = number of instances where the residual disinfectant concentration is measured but not detected and no HPC is measured;

d = number of instances where the residual disinfectant concentration is measured but not detected and where the HPC is >500/ml; and

e = number of instances where the residual disinfectant concentration is not measured and HPC is >500/ml.

(2) If the department determines based upon site-specific considerations, that a system has no means for having a sample transported and analyzed for HPC by a certified laboratory under the requisite time and temperature conditions specified in 43.6(4)"a"(3) and that the system is providing adequate disinfection in the distribution system, the requirements of subparagraph "d"(1) of this paragraph do not apply.

43.6(3) Filtration

A public water system that uses a surface water source or a ground water source under the direct influence of surface water must provide treatment consisting of both disinfection, as specified in 43.6(2), and filtration treatment which complies with the requirements of paragraph "a", "b", "c", or "d" of this subrule by December 30, 1991. Failure to meet any requirement of this subrule after the date specified in this introductory paragraph is a treatment technique violation.

a. Conventional filtration treatment or direct filtration.

(1) For systems using conventional filtration or direct filtration, the turbidity level of representative samples of a system's filtered water must be less than or equal to 0.5 NTU in at least 95 percent of the measurements taken each month, measured as specified in 43.6(4)"a"(4) and "b"(1).

(2) The turbidity level of representative samples of a system's filtered water must at no time exceed 5 NTU, measured as specified in 43.6(4)"a"(4) and "b"(1).

b. Slow sand filtration.

(1) For systems using slow sand filtration, the turbidity level of representative samples of a system's filtered water must be less than or equal to 1 NTU in at least 95 percent of the measurements taken each month, measured as specified in 43.6(4)"a"(4) and "b"(1).

(2) The turbidity level of representative samples of a system's filtered water must at no time exceed 5 NTU, measured as specified in 43.6(4)"a"(4) and "b"(1).

c. Diatomaceous earth filtration.

(1) For systems using diatomaceous earth filtration, the turbidity level of representative samples of a system's filtered water must be less than or equal to 1 NTU in at least 95 percent of the measurements taken each month, measured as specified in 43.6(4)"a"(4) and "b"(1).

(2) The turbidity level of representative samples of a system's filtered water must at no time exceed 5 NTU, measured as specified in 43.6(4)"a"(4) and "b"(1).

d. Other filtration technologies. A public water system may use either a filtration technology not listed in paragraphs "a"-"c" of this subrule or a filtration technology listed in paragraphs "a"-"c" of

this subrule at a higher turbidity level if it demonstrates to the department through a preliminary report submitted by a registered professional engineer, using pilot plant studies or other means, that the alternative filtration technology, in combination with disinfection treatment that meets the requirements of 43.6(2), consistently achieves 99.9 percent removal and/or inactivation of *Giardia lamblia* cysts and 99.99 percent removal and/or inactivation of viruses. For a system that makes this demonstration, the requirements of paragraph "b" of this subrule apply.

43.6(4) Analytical and monitoring requirements

a. Analytical requirements. Only the analytical method(s) specified in this paragraph, or otherwise approved by EPA, may be used to demonstrate compliance with the requirements of 43.6(2) and 43.6(3). Measurements for pH, temperature, turbidity, and residual disinfectant concentrations must be conducted by a grade III or IV operator or any certified operator under the direct supervision of a grade III or IV operator meeting the requirements of 567--81(455B). Measurements for total coliforms, fecal coliforms, and HPC must be conducted by a laboratory certified by the department or EPA to do such analysis. Until laboratory certification criteria are developed for the analysis of HPC and fecal coliforms, any laboratory certified for total coliform analysis by EPA is deemed certified for HPC and fecal coliform analysis. The following procedures shall be performed in accordance with the publications listed in the following section.

(1) Fecal coliform concentration--Method 908C (Fecal Coliform MPN Procedures), pp. 878-880, Method 908D (Estimation of Bacterial Density), pp. 880-882, or Method 909C (Fecal Coliform Membrane Filter Procedure), pp. 896-898, as set forth in "Standard Methods", 1985, American Public Health Association et al., 16th edition.

(2) Total coliform concentration--Method 908A (Standard Total Coliform Multiple--Tube (MPN) Tests), pp. 872-876, Method 908B (Application of Tests to Routine Examinations), pp. 876-878, Method 908D (Estimation of Bacterial Density), pp. 880-882, Method 908A (Standard total Coliform Membrane Filter Procedure), pp. 887-894, or Method 908B (Delayed-Incubation Total Coliform Procedure), pp. 894-896, as set forth in "Standard Methods", 1985, American Public Health Association et al., 16th edition; Minimal Medium ONPG-MUG Test, as set forth in the article "National Field Evaluation of a Defined Substrate Method for the Simultaneous Enumeration of Total Coliforms and *Escherichia coli* from Drinking Water; Comparison with the Standard Multiple Tube Fermentation Method" (Edberg et al.), Applied and Environmental Microbiology, Volume 54, pp. 1595-1601, June 1988 (as amended under Erratum, Volume 54, p. 3197, December, 1988).

(Note: The Minimal Medium ONPG-MUG Test is sometimes referred to as the Autoanalysis Colilert System). Systems may use a five-tube test or a ten-tube test.

(3) Heterotrophic Plate Count--Method 907A (Pour Plate Method), pp. 864-866, as set forth in "Standard Methods", 1985, American Public Health Association et al., 16th edition.

(4) Turbidity--Method 214A (Nephelometric Method--Nephelometric Turbidity Units), pp. 134-136, as set forth in "Standard Methods", 1985, American Public Health Association et al., 16th edition.

(5) Residual disinfectant concentration--Residual disinfectant concentrations for free chlorine and combined chlorine (chloramines) must be measured by Method 408C (Amperometric Titration Method), pp. 303-306, Method 408D (DPD Ferrous Titrimetric Method), pp. 306-309, Method 408E (DPD Colorimetric Method), pp. 309-310, or Method 408F (Leuco Crystal Violet Method), pp. 310-313, as set forth in "Standard Methods", 1985, American Public Health Association et al., 16th edition. Residual disinfectant concentrations for free chlorine and combined chlorine may also be measured by using DPD colorimetric test kits if approved by the department. Residual disinfectant concentrations for ozone must be measured by the Indigo Method as set forth in Bader, H., Hoigne, J., "Determination of Ozone in Water by the Indigo Method; A Submitted Standard Method"; Ozone Science and Engineering, Vol. 4, pp. 169-176, Pergamon Press Ltd., 1982, or automated methods which are calibrated in reference to the results obtained by the Indigo Method on a regular basis, if approved by the department.

Note: This method will be published in the 17th edition of "Standard Methods", American Public Health Association et al.; the Iodometric Method in the 16th edition may not be used.

Residual disinfectant concentrations for chlorine dioxide must be measured by Method 410B (Amperometric Method) or Method 410C (DPD Method) pp. 322-324, as set forth in "Standard Methods", 1985, American Public Health Association, et al., 16th edition.

(6) Temperature--Method 212 (Temperature), pp. 126-127, as set forth in "Standard Methods", 1985, American Public Health Association et al., 16th edition.

(7) pH--Method 423 (pH Value), pp. 429-437, as set forth in "Standard Methods", 1985, American Public Health Association, 16th edition.

b. Monitoring requirements for systems using filtration treatment. A public water system that uses a surface water source or a ground water source under the influence of surface water and provides filtration treatment must monitor in accordance with this paragraph ("b") beginning December 30 1991, or when filtration is installed.

(1) Turbidity measurements as required by 43.6(3) must be performed on representative samples of the system's filtered water every four hours (or more frequently) that the system serves water to the public. A public water system may substitute continuous turbidity monitoring for grab sample monitoring if it validates the continuous measurement for accuracy on a regular basis using a calibration protocol approved by the department and audited for compliance during sanitary surveys. For any systems using slow sand filtration or filtration treatment other than conventional treatment, direct filtration, or diatomaceous earth filtration, the department may reduce the sampling frequency to once per day if it determines that less frequent monitoring is sufficient to indicate effective filtration performance. For systems serving 500 or fewer persons, the department may reduce the turbidity sampling frequency to once per day, regardless of the type of filtration treatment used, if the department determines that less frequent monitoring is sufficient to indicate effective filtration performance.

(2) The residual disinfectant concentration of the water entering the distribution system must be monitored continuously, and the lowest value must be recorded each day, except that if there is a failure in the continuous monitoring equipment, grab sampling every 4 hours may be conducted in lieu of continuous monitoring, but for no more than 5 working days following the failure of the equipment, and systems serving 3,300 or fewer persons may take grab samples in lieu of providing continuous monitoring on an ongoing basis at the frequencies each day prescribed below:

System size (persons served)	Samples/ day(*)
<500.....	1
501 to 1,000.....	2
1,001 to 2,500.....	3
2,500 to 3,300.....	4

(*) The day's samples cannot be taken at the same time. The sampling intervals are subject to departmental review and approval.

If at any time the disinfectant concentration falls below 0.3 mg/l in a system using grab sampling in lieu of continuous monitoring, the system must take a grab sample every 4 hours until the residual disinfectant concentration is equal to or greater than 0.3 mg/l.

(3)

1. The residual disinfectant concentration must be measured at least at the same points in the distribution system and at the same time as total coliforms are sampled, as specified in 43.2(1)"c", except that the department may allow a public water system which uses both a surface water source or a ground water source under direct influence of surface water, and a ground water source to take disinfectant residual samples at points other than the total coliform sampling points if these points are included as a part of the coliform sample site plan (41.2(1)"c"(1)1) and the department determines that such points are more representative of treated (disinfected) water quality within the distribution system. Heterotrophic bacteria,

measured as heterotrophic plate count (HPC) as specified in subparagraph "a"(3) of this subrule, may be measured in lieu of residual disinfectant concentration.

2. If the department determines, based on site-specific considerations, that a system has no means for having a sample transported and analyzed for HPC by a certified laboratory under the requisite time and temperature conditions specified by subparagraph "a"3 of this subrule and that the system is providing adequate disinfection in the distribution system, the requirements of paragraph "c"(3)1 of this subrule do not apply to that system.

43.6(5) Reporting and record keeping requirements

A public water system that uses a surface water source or a ground water source under the direct influence of surface water and provides filtration treatment must report monthly to the department the information specified in this paragraph beginning December 30, 1991, or when filtration is installed, whichever is later.

a. Turbidity measurements as required by 43.6(4)"b"(1) must be reported within 10 days after the end of each month the system serves water to the public. Information that must be reported includes:

- (1) The total number of filtered water turbidity measurements taken during the month.
- (2) The number and percentage of filtered water turbidity measurements taken during the month which are less than or equal to the turbidity limits specified in 43.6(3) for the filtration technology being used.
- (3) The date and value of any turbidity measurements taken during the month which exceed 5 NTU.

b. Disinfection information specified in 43.6(4)"b" must be reported to the department within 10 days after the end of each month the system serves water to the public. Information that must be reported includes:

- (1) For each day, the lowest measurement of residual disinfectant concentration in mg/l in water entering the distribution system.
- (2) The date and duration of each period when the residual disinfectant concentration in water entering the distribution system fell below 0.3 mg/l and when the department was notified of the occurrence.
- (3) The following information on the samples taken in the distribution system in conjunction with total coliform monitoring pursuant to 41.2(1)"c":

1. Number of instances where the residual disinfectant concentration is measured;
2. Number of instances where the residual disinfectant concentration is not measured but heterotrophic bacteria plate count (HPC) is measured;
3. Number of instances where the residual disinfectant concentration is measured but not detected and no HPC is measured;
4. Number of instances where no residual disinfectant concentration is detected and where HPC is >500/ml;
5. Number of instances where the residual disinfectant concentration is not measured and HPC is >500/ml;
6. For the current and previous month the system serves water to the public, the value of "V" in the following formula:

$$V = \frac{c+d+e}{a+b} \times 100$$

where

a=the value in subparagraph "b"(3)1 of this paragraph,
b=the value in subparagraph "b"(3)2 of this paragraph,
c=the value in subparagraph "b"(3)3 of this paragraph,
d=the value in subparagraph "b"(3)4 of this paragraph, and
e=the value in subparagraph "b"(3)5 of this paragraph.

7. If the department determines, based on site-specific considerations, that a system has no means for having a sample transported and analyzed for HPC by a certified laboratory with the requisite time and temperature conditions specified by 43.6(4)"a"(3) and that the system is providing adequate disinfection in the distribution system, the requirements of subparagraph "b"(3)1-6 of this paragraph do not apply.

(4) A system need not report the data listed in paragraph "b"(1) of this paragraph if all data listed in paragraphs "b"(1)-(3) of this section remain on file at the system and the department determines that the system has submitted all the information required by subparagraphs "b"(1)-(3) of this paragraph for at least 12 months and the department confirms at each sanitary survey that the data is on hand and complete.

c.

(1) Each system, upon discovering that a waterborne disease outbreak potentially attributable to that water system has occurred, must report that occurrence to the department as soon as possible, but no later than by the end of the next business day.

(2) If at any time the turbidity exceeds 5 NTU, the system must inform the department as soon as possible, but no later than the end of the next business day.

(3) If at any time the residual falls below 0.2 mg/l in the water entering the distribution system, the system must notify the department as soon as possible, but no later than by the end of the next business day. The system also must notify the department by the end of the next business day whether or not the residual was restored to at least 0.2 mg/l within 4 hours.

Mr. Stokes distributed copies of the proposed rules along with a synopsis of rule changes and explained same.

This was an informational item; no action was required.

NOTICE OF INTENDED ACTION--CHAPTER 23 AMENDMENT, NATIONAL
EMISSION STANDARD FOR AIR POLLUTANTS, ASBESTOS DEMOLITION &
RENOVATION

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

The Department has adopted all of the National Emission Standards for Hazardous Air Pollutants which can be delegated to the states, with the exception of asbestos demolition and renovation operations. The Department is now proposing to adopt these asbestos regulations by reference.

The NESHAPS rules proposed for adoption are federally enforceable at this time. Adoption of the rules by IDNR would not impose any additional restrictions on industry but merely transfer the primary authority to the department for enforcing the regulations.

Attached for your approval is a copy of a notice of intended action. A copy of the department's draft plan for the implementation of the asbestos demolition and renovation rules was provided to the Commission in January as an informational item.

(Rule is shown on the following 1 1/2 pages)

ENVIRONMENTAL PROTECTION COMMISSION (567)
Notice of Intended Action

Pursuant to the authority of Iowa Code section 455B.133, the Environmental Protection Commission gives Notice of Intended Action to amend Chapter 23, "Emission Standards for Contaminants" by proposing to adopt by reference federal regulations pertaining to emission standards for hazardous air pollutants by including an additional pollutant category.

In order to prevent new air pollution problems, by Section 112 of the Clean Air Act, the EPA was required to adopt emission standards for "hazardous air pollutants," those pollutants which cause or contribute to air pollution which may reasonably be anticipated to result in an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness. These standards apply to new and existing sources and are adopted by reference by subrule 567--23.1(3)(455B).

In greater detail, the following amendment is proposed:

Item 1 amends subrule 567--23.1(3)(455B) by including federal regulations adopted by reference pertaining to asbestos demolition and renovation operations. These are regulations, specified in 40 CFR Part 61 which were promulgated by EPA in 1984 and which the Department of Natural Resources is now proposing to adopt.

Any person interested in receiving a copy of the federal regulations proposed to be adopted by reference may contact the Department of Natural Resources. Copies are available upon request from the Department for the cost of reproduction.

Any interested party may file a written statement of position on the subjects covered by the proposed rules no later than April 13, 1990. These written statements should be directed to the Director of the Department of Natural Resources, 900 East Grand Avenue, Des Moines, Iowa 50319-0034. Persons or organizations are also invited to present oral or written comments at a public hearing on April 10, 1990 at 10:30 a.m. in the conference room of the Atlantic Municipal Utilities Building, 15 West Third Street, Atlantic, Iowa; on April 11, 1990 at 11:00 a.m. in the Gold Room of the University of Iowa, Oakdale Campus, Oakdale Hall, Oakdale, Iowa (Exit 240, I-80 to Hwy. 965); and on April 12, 1990 at 10:00 a.m. in the east half of the fourth floor conference room of the Wallace State Office Building, 900 East Grand Avenue, Des Moines, Iowa.

These rules are intended to implement Iowa Code section 455B.133.

The following amendment is proposed:

ITEM 1. Subrule 567--23.1(3)(455B) is amended as follows:

23.1(3) Emission standards for hazardous air pollutants. The federal standards of emissions for hazardous air pollutants, 40 Code of Federal Regulations Part 61 as amended through March 19, 1987, are adopted by reference, except 40 CFR §61.20 to §61.28, §61.90, to 61.98, §61.100 to §61.108, §61.120 to 61.126, and ~~§61.145 to 61.147~~; and §61.250 to 61.252 and shall apply to the following affected pollutants and facilities and activities listed below. The corresponding 40 C.F.R. Part 61 subpart designation is in parentheses. Reference test methods (Appendix B), compliance status information requirements (Appendix A), quality assurance procedures (Appendix C) and the general provisions (Subpart A) of Part 61 also apply to the affected activities or facilities.

Further amend subrule 567--23.1(3)(455B) by revising the following paragraph:

a. Asbestos. Any of the following involves asbestos emissions: Asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, and spraying applications, and demolition and renovation operations. ~~Demolition-and-renovation-emissions-as-stated-in-40 CFR-§61-145-through-§61-147-are-not-included-~~ (Subpart M)

Date

Larry J. Wilson, Director

Mr. Stokes gave an explanation of the rules.

Discussion followed.

Motion was made by Margaret Prael to approve Notice of Intended Action--Chapter 23 Amendment, National Emission Standard for Air Pollutants, Asbestos Demolition and Renovation Operations. Seconded by William Ehm. Motion carried unanimously.

NOTICE OF INTENDED ACTION--CHAPTER 135 AMENDMENT, CORRECTIVE ACTION LEVELS FOR PETROLEUM CONTAMINATION FROM UST INSTALLATIONS

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

The Commission will be asked to approve the attached rule revisions and notice of intended action for the purpose of seeking public input on the rule revisions proposed. Three public hearings would be held, one each at Des Moines, Cedar Rapids, and Denison.

New subrule 135.7(9) proposes 5 micrograms per liter (ug/l) Benzene, 2,420 ug/l Toluene, and 12,000 ug/l Xylene as the corrective action levels in groundwater; and 50 milligrams per kilogram (mg/kg) Total Organic Hydrocarbons for soils. The current action level for Benzene is 0.7 ug/l based on application of provisions of Chapter 133 of the departments rules-Rules for Determining Cleanup Actions and Responsible Parties". The change in the Benzene standard proposed in these rules will supersede the levels set forth in Chapter 133, as applied to underground storage tanks, as provided in 133.1(1). The action levels in

this proposed rule are the same as those set forth in Chapter 133 relative to Toluene and Xylene.

Subrule 135.8(3) is being replaced. The new subrule adds specific minimum assessment procedures that must be followed when determining possible site contamination. Previously this was done only through guidance documents from the department.

A new subrule 135.8(4) has been added. This subrule addresses procedures for assessments of contamination when overexcavation of contaminated soil is done at the time of closure. This was not previously described by a written procedure.

New subrule 135.9 provides accepted analytical procedures for petroleum substances, and information required in laboratory reports. This portion of the proposal is needed to standardize the analytical methods being used, and ensure adequacy and accuracy of results and reporting.

(Rule is shown on the following 7 pages)

ENVIRONMENTAL PROTECTION COMMISSION{567}

Notice of Intended Action

Pursuant to the Authority of Iowa Code section 455B.474, the Environmental Protection Commission gives Notice of Intended Action to amend Chapter 135, "Technical Standards for Underground Storage Tanks." The amendments establish corrective action levels for petroleum contamination, minimum requirements for assessment of contamination at site closures, minimum requirements for assessment of contamination after overexcavation of contaminated soils, and acceptable analytical methods for determining petroleum contamination.

Chapter 135 currently requires a site assessment for contamination when Underground Storage Tanks are permanently closed or are to be changed to an unregulated use. Minimum requirements that would be acceptable for a site assessment are not given. The amendments establish the minimum number of soil and groundwater samples, locations the samples must be taken, and for petroleum contamination, the contaminants that must be analyzed. The amendments also include the laboratory analytical methods that must be used for determining petroleum contamination and the information required in the laboratory reports.

Corrective action levels are currently set using Chapter 133, "Rules for Determining Cleanup Action and Responsible Parties." As provided in subrule 133.1(1), Chapter 135 is being amended to establish corrective action levels for benzene, toluene, and xylene in groundwater, and total organic hydrocarbon in soil for petroleum contamination. Only benzene is different from Chapter 133 establishing five(5) micrograms per liter as the corrective action level in groundwater.

These rule amendments may impact small business.

Any interested party may file a written statement of position on the subjects covered by these proposed rules no later than April 20, 1990. These written comments should be directed to the Director of the Department of Natural Resources, 900 East Grand Avenue, Des Moines, Iowa 50319-0034. Persons or organizations are invited to present written or oral comments at public hearings on these proposed rules which will be held: April 10, 1990 at 1 p.m. in the Community Room, City Hall, Denison, Iowa; April 12, 1990 at 1 p.m. in the Iowa Room, Iowa Hall, Kirkwood Community College, Cedar Rapids, Iowa; and April 13, 1990 at 1 p.m. in the fifth floor conference room, Wallace State Building, 900 East Grand, Des Moines, Iowa.

These rules are intended to implement Iowa Code section 455B.474.

Under the authority of 455B.474(1) the following amendments to Chapter 567---135(455B) are being made.

ITEM 1. Amend rule 567---135.7(455B), "Release response and corrective action for UST systems containing petroleum or hazardous substances," by adding the following new subrule:

135.7(9) Contamination corrective action levels.

The following corrective action levels apply for petroleum contamination as regulated by Chapter 135. The contaminant concentrations must be determined by laboratory analysis. Final cleanup determination is not limited to these contaminants.

	Total Organic Hydrocarbon (TOH)	Benzene	Toluene	Xylene
Soil	50 mg/kg	---	---	---
Groundwater	---	5 ug/L	2,420 ug/L	12,000 ug/L

ITEM 2. Rescind subrule 567---135.8(3) and replace it with the following:

135.8(3) Assessing the site at closure or change in service.

a. Before permanent closure or a change in service is completed, owners or operators must measure for the presence of a release where contamination is most likely to be present at the UST site. In selecting the sample types, sample locations, and measurement methods, owners and operators must consider the method of closure, the nature of the stored substance, the type of backfill, the depth to groundwater, and other factors appropriate for identifying the presence of a release.

For soil and groundwater samples at petroleum UST sites, a minimum of the following contaminants must be analyzed with each con-

centration reported separately: total organic hydrocarbons (as the product in the tank: gasoline, diesel, oil, etc.), benzene, toluene, and xylene. All such samples shall be collected separately, and submitted to a qualified laboratory for analysis within 48 hours of collection, and reported separately. Samples shall be refrigerated and protected from freezing during shipment to the laboratory.

b. For all permanent tank closures or changes in service, at least one water sample must be taken from the first saturated groundwater zone via a monitoring well or borehole. The well or borehole must be located downgradient from and as close as possible to the excavation but no further away than 20 feet.

c. For permanent closure by tank removal, the minimum number of soil samples that must be taken depends on tank size. Samples must be taken at a depth three feet below the base of the tank along the tank's centerline as follows:

Nominal Tank Capacity (gallons)	Number of Samples	Location on Centerline
1,000 or less	1	center of tank
1,001 - 8,000	2	1/3 from ends
8,001 - 30,000	3	5 feet from ends and at center of tank
30,001 - 40,000	4	5 and 15 feet from ends
40,001 and more	5	5 and 15 feet from ends and at center of tank

Soil samples must also be taken at least every ten feet along product piping at a depth of three feet below the piping. If contamination is suspected or found in any area within the exca-

vation (i.e. sidewall or bottom), a soil sample must also be taken at that location.

d. For closing a tank in place by filling with an inert solid material or for a change in service, the minimum number of soil borings required for sampling depends on the size of the tank. Soil samples must be taken within five feet of the sides and ends of the tank at a depth of three feet below the base of the tank at equal intervals around the tank. The minimum number of soil borings and samples required are as follows:

Nominal Tank Capacity (gallons)	Number of Samples	Location of Samples
6,000 or less	4	1 each end and each side
6,001-12,000	6	1 each end and 2 each side
12,001 or more	8	1 each end and 3 each side

Soil samples must also be taken at least every ten feet along product piping at a depth of three feet below the piping.

e. A closure report must be submitted to the department within thirty (30) days of completion of soil and water sample analyses. The report must include all laboratory analytical reports, soil boring and well or borehole construction details and stratigraphic logs, and a dimensional drawing showing location and depth of all tanks, piping, sampling, and wells or boreholes.

f. The requirements of this subrule are satisfied if one of the external release detection methods allowed in 135.5(4)"e" and "f" is operating in accordance with the requirements in 135.5(4) at the time of closure, and indicates no release has occurred.

g. If contaminated soils, contaminated groundwater, or free product as a liquid or vapor is discovered under paragraph "a",

or by any other manner, owners and operators must begin corrective action in accordance with rule 135.7(455B).

ITEM 3. Amend Rule 567---135.8 by adding the following new subrule 135.8(4) and renumbering the existing subrule and those that follow.

135.8(4) Overexcavation of contaminated soils at closure.

a. If contaminated soils are discovered while assessing a site at closure in accordance with 135.8(3), owners and operators may overexcavate the contaminated soils during closure. The contamination and overexcavation must be reported to the department in accordance with the requirements of 135.6(4)"a" and prior to backfilling the excavation. Initial soil samples required in 135.8(3)"c" and "d" must be taken in the contaminated areas prior to overexcavation.

b. Excavated contaminated soils must be properly disposed in accordance with chapters 567---100, 101, 102, 120, and 121(455B) of the Iowa Administrative Code.

c. Soil sampling must be done following overexcavation. At a minimum, one soil sample must be taken for every 100 square feet of the base and sides of the excavation. The sample locations should be equally spaced from each other. When sampling, areas still suspected of being contaminated or previously showing contamination must be sampled. The soil samples must be analyzed in accordance with paragraph 135.8(3)"a".

d. A report must be submitted to the department within thirty (30) days of completion of the laboratory analysis. The report must include the requirements of 135.8(3)"e" and a dimensional drawing showing the depth and area of the overexcavation.

ITEM 4. Amend Chapter 567---135(455B) by adding the following new rule.

567---135.9(455B) Laboratory analytical methods for petroleum contamination of soil and water.

135.9(1) General. When having soil or water analyzed for petroleum or hazardous substances, owners and operators of UST systems must ensure appropriate and accurate analytical procedures are used. This rule provides acceptable analytical procedures for petroleum substances and required information that must be provided in all laboratory reports.

135.9(2) Laboratory Report. All laboratory reports must contain the following information:

- a. Laboratory name, address, and phone number.
- b. Medium sampled (soil, water).
- c. Client submitting sample (name, address, phone number).
- d. Sample collector (name, phone number).
- e. UST site address.
- f. Clients sample location identifier.
- f. Date sample was collected.
- g. Date sample was received at laboratory.
- h. Date sample was analyzed.
- i. Results of analyses and units of measure.
- j. Detection limits.
- k. Methods used in sample analyses (preparation method, sample detection method, and quantitative method).
- l. Laboratory sample number.

m. Analyst name.

n. Signature of analyst's supervisor.

135.9(3) Analysis of soil and water for high volatile petroleum compounds (ie. gasoline, benzene, toluene, xylene).

a. Sample preparation and analysis shall be by Method OA-1, "Method for Determination of Volatile Petroleum Hydrocarbons (gasoline)," revision 1/10/90, University Hygienic Laboratory, Iowa City, Iowa. This method is based on U.S. EPA methods 5030, 8000, and 8015, SW-846, "Test Methods for Evaluating Solid Waste," 3rd Edition. Copies of Method OA-1 are available from the department.

135.9(4) Analysis of soil and water for low volatile petroleum hydrocarbon contamination (i.e., all grades of diesel fuel, fuel oil, kerosene, oil, and mineral spirits).

a. Sample preparation and analysis shall be by Method OA-2, "Determination of Extractable Petroleum Products (and Related Low Volatility Organic Compounds)," revision 01/10/90, University Hygienic Laboratory, Iowa City, Iowa. This method is based on U.S. EPA methods 3500, 3510, 3520, 3540, 3550, 8000, and 8100, SW-846, "Test Method for Evaluating Solid Waste," 3rd Edition. Copies of Method OA-2 are available from the department.

Mr. Stokes gave a detailed explanation of the rules.

Mike Earley stated that he will abstain from discussion on this item as he has a case in point with the department relative to this issue.

Discussion followed regarding the health risk level for benzene, and the distance required between soil samples.

Motion was made by Margaret Prah1 to approve Notice of Intended Action--Chapter 135 Amendment, Corrective Action Levels for Petroleum Contamination from Underground Storage Tank Installations. Seconded by Richard Hartsuck. Motion carried unanimously with Mike Earley abstaining for reasons previously explained.

PROPOSED RULE--CHAPTER 121 AMENDMENT, LAND TREATMENT PROCEDURES FOR PETROLEUM CONTAMINATED SOILS

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

The Commission will be provided copies of proposed changes to Chapter 121 which will establish procedures for land treatment of petroleum contaminated soil. Petroleum contaminated soil frequently results from removal of underground storage tanks and petroleum spills.

The new subrule 121.3(2) allows the land application of petroleum contaminated soil without a permit, if certain criteria can be met. The criteria include a maximum application rate of 500 ton per acre per year. This maximum application rate was derived by multiplying the weight of contaminated soil per ton by a maximum application depth of four inches. The result is approximately 500 ton/acre/year. Contaminated soil which is saturated or in slurry condition cannot be land applied.

Land application must be 500 feet from a well and 200 feet from a occupied residence, stream, lake, pond, sinkhole or tile line surface intake located downgradient of the land application site. These criteria are similar to application separation distances for other types of solid wastes in Chapter 121.

The new subrule discourages the land application of petroleum contaminated soil on frozen or snow covered ground. If application cannot be avoided the slope of the land must be less than 5% and the application rate must be less than or equal to 1/4 inch thick. These criteria will minimize problems associated with runoff. In some cases, a certified statement from the county soil conservation district indicating that the site is being

February 1990

Environmental Protection Commission Minutes

managed so that soil loss limits are not being exceeded may be required.

The commission will be asked to approve a notice of intended action at their March commission meeting.

(Rule is shown on the following 2 pages)

ENVIRONMENTAL PROTECTION COMMISSION (567)
Notice of Intended Action

Pursuant to Iowa Code section 455B.304 the Environmental Protection Commission proposes to amend 567--chapter 121 "Land Application of Wastes", Iowa Administrative Code.

Specifically, the Commission proposes to adopt a rule pertaining to the Land application of petroleum contaminated soils.

Any interested person may file with the director written comments on the proposed amendments through May 20, 1990. Interested persons may also provide oral comments at public hearings to be held at the following locations and times: Iowa City, Oakdale Campus, Gold Room, 10:00 am, May 8, 1990; Independence, County Extension Office, Meeting Room, 2:00 pm, May 8; Atlantic, Atlantic Municipal Utilities Board Room, 10:00 am, May 9; Storm Lake, Fire Department Meeting Room, 3:00 pm, May 9; Des Moines, Wallace Building Conference Room 5 East, 10:00 am, May 10; Mason City, Fire Station Meeting Room, 2:30 pm, May 10.

These amendments may impact small businesses.

The following amendments are proposed.

Item 1. Renumber the existing subrule 121.3(2) as 121.3(3) and add the following new subrule:

121.3(2) Petroleum contaminated soil. Petroleum contaminated soil may be land applied without a permit if the land application does not violate the following.

- a) The maximum soil application rate shall not exceed 500 ton/acre per year.
- b) The soil will not exceed four inches in depth of application.
- c) Contaminated soil which is saturated or in slurry condition cannot be land applied.
- d) Contaminated soil cannot be applied within 500 feet of a well nor within 200 feet of an occupied residence.
- e) Contaminated soil cannot be applied within 200 feet from a stream, lake, pond, sinkhole or tile line surface intake located downgradient of the land application site.
- f) The application of contaminated soil on frozen or snow covered ground should be avoided. If application is necessary, it shall be limited to land areas of less than 5% slope. Application rate must be $\leq 1/4$ -inch thick.

g) Slope restrictions and incorporation requirements:

Slope Class	Application Rates	Mechanical Incorporation Requirements
$\leq 5\%$	$\leq 1/4$ inch	None
$\leq 5\%$	$> 1/4$ to 4 inches	Within 48 hrs. after application
* > 5 to 9%	$\leq 1/4$ inch	None
* > 5 to 9%	$> 1/4$ to 4 inches	Within 48 hrs. after application
* $> 9\%$	No application permitted	

* Land farming requirements for sites with slopes $> 5\%$ must be accompanied by a certified statement from the county soil conservation district indicating that the site is being managed so that the established soil loss limits are not being exceeded. The incorporation requirements for these sites may be waived if it will interfere with conservation practices.

h) Notification requirements. The owner of the site where the petroleum contaminated soil originated, shall notify the department prior to land application of the petroleum contaminated soil. This shall be followed by submitting a "Land Application Notification" form, supplied by the department.

i) Analytical requirements. Generally contaminated soil can be land applied without extensive monitoring programs; however, site specifications may necessitate environmental sampling to determine the impact of the application activity.

j) Record keeping requirements. The owner of the site where the petroleum contaminated soil originated must maintain adequate records on the premises to document compliance with subrule 567--121.3(2) of the Iowa Administrative Code. The records must be maintained for five years following the last application of soil at the land farming area. The records must be available for inspection and evaluation by the department during normal working hours.

Item 2. Amend new subrule 121.3(3) introductory paragraph as follows:

121.3(3) Other solid wastes. No prior approval is required for the land application of any other solid waste (other than municipal sewage sludge and petroleum contaminated soil) which does not violate the following:

Mr. Stokes distributed copies of the proposed rules and explained same.

Clark Yeager stated that he would question the advisability of applying the soil to anything greater than a 5% slope. He added that 9% would definitely be too much of a slope.

Mr. Stokes reponded that the slope class of 5 to 9% could be deleted from the rules if the Commission so desires.

The consensus of the Commission was to delete the two lines under slope restrictions referring to the 5 to 9% slope.

Discussion followed.

This was an informational item; no action was required.

PROPOSED RULE--CHAPTER 109 AMENDMENT, SOLID WASTE DISPOSAL FEES

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

The Commission will be provided copies of proposed rules amending Chapter 109 to include legislative changes to the Code of Iowa 455B.310.

The change in subrule 109.1(1) states the tonnage fees received will be deposited in the solid waste account of the groundwater protection fund.

Rule 109.3 is being replaced. The new rule adds specific exclusions from fee payment to sites with special permit provisions which limit the facility to the disposal of construction and demolition waste, landscape waste, coal combustion waste, foundry sand or solid waste materials approved by the DNR for lining or capping or constructing berms, dikes or roads in the site. Wastes which are not buried at the site, and are salvaged or recycled in accordance with the landfill permit will also be exempt from the fee.

Subrule 109.4(2) will be amended by rescinding paragraph 109.4(2)(a). The new paragraph will state that beginning July 1, 1988 the tonnage fee will be \$1.50 per ton and increase annually by \$.50 through July 1, 1992.

109.4(2) will be further amended to include a new volume/weight conversion for contaminated soil (1 cubic yard = 2000 pounds). Engineering texts were reviewed to determine the appropriate conversion for this material.

Subrule 109.5(2) will be amended to explain the fee payment schedule. As provided in the 455B.310 the fees will be submitted quarterly on Jan 1, April 1, July 1, and October 1.

New rule 109.7 explains the penalty fee associated with failing to pay the fee and delinquent payment.

The Commission will be asked to approve a Notice of Intended Action at their March Commission meeting.

(Rule is shown on the following 2 pages)

ENVIRONMENTAL PROTECTION COMMISSION (567)
Notice of Intended Action

Pursuant to Iowa Code section 455B.304, the Environmental Protection Commission gives Notice of Intended Action to amend 567--chapter 109, "Fees for Disposal of Solid Wastes at Sanitary Landfills", Iowa Administrative Code.

The Commission proposes to amend 567--chapter 109 to conform to recent legislative changes including the addition of certain exclusions from the fee for landscape waste, coal combustion residues, and foundry sand at landfills which accept only those wastes, and the increase in fees. Any additional legislative changes will be considered if they occur prior to the adoption of a final rule.

Any interested person may file with the director written comments on the proposed amendments through May 20, 1990. Interested persons may also provide oral comments at public hearings to be held at the following locations and times: Iowa City, Oakdale Hall, Gold Room, 10:00 am, May 8; Independence, County Extension Board Room, 2:00 pm, May 8; Atlantic, Atlantic Municipal Utilities Board Room, 10:00 am, May 9; Storm Lake, Fire Department Meeting Room, 3:00 pm, May 9; Des Moines, Wallace Building, Conference Room 5E, 10:00 am, May 10; Mason City, Fire Department Meeting Room, 3:00 pm, May 10.

These rules are intended to implement Iowa Code section 455B.310.

These amendments may impact small businesses.

The following amendments are proposed.

Item 1. Amend subrule 109.1(1) as follows:

109.1(1) Authority Pursuant to Iowa Code sections 455B-309 and 455B-310, the department has authority to collect fees for the disposal of solid waste at sanitary landfills. Moneys collected or received by the department shall be deposited in the state treasury to the credit of the groundwater fund. All tonnage fees received by the department under this section shall be deposited in the solid waste account of the groundwater protection fund created under Iowa Code section 455E.11.1.

Item 2. Rescind rule 109.3 and replace it with the following:

567--109.3 (455B) Exclusions

109.3(1) The fees specified in rule 109.4(455B) do not apply to solid waste disposal facilities with special permit provisions which limit the site to the disposal of construction and demolition waste, landscape waste, coal combustion waste, foundry sand or solid waste materials approved by the department for lining or capping or constructing berms, dikes or roads in the project.

109.3(2) Fees do not apply to wastes which will not be buried at a sanitary landfill, if such material is salvaged or recycled in accordance with the provisions of the landfill permit.

Item 3. Amend subrule 109.4(2) by rescinding paragraph 109.4(2)a and replace it with the following:

For the year beginning July 1, 1988, the tonnage fee is one dollar and fifty cents (\$1.50) per ton of solid waste and shall increase annually in the amount of fifty cents (\$.50) per ton through July 1, 1992.

Further amend subrule 109.4(2) by amending subparagraph 109.4(2)d(1) by adding the following Type of Waste and Volume/Weight conversion after the "Construction and Demolition Waste" and before "Other"

Contaminated soil	1 cubic yard = 2000 pounds
-------------------	----------------------------

Further amend subrule 109.4(2) by adding the following new paragraph:

e) A county in which a privately operated landfill accepts solid waste from outside of the county may charge an additional tonnage fee for the disposal of solid waste at the sanitary landfill which is not more than one hundred percent of the fee otherwise established in this section. The additional fee charged and the monies collected shall be used exclusively for the development and implementation of alternatives to sanitary landfills or for costs incurred by the county to abate problems associated with the operation of the sanitary landfill.

Item 4. Amend subrule 109.5(2) as follows:

109.5(2) Manner, time, and place. Fees and forms are due on April 15 for the previous calendar year. Fees are to be paid on a quarterly basis. The fees will be due January 1, April 1, July 1, and October 1 for the previous quarter. The person shall present or mail the completed form with the appropriate fees to: Accounting, Department of Natural Resources, Henry A. Wallace Building, 900 East Grand, Des Moines, Iowa 50319.

Item 5. Amend rule 567--109.7(455B) as follows:

Failure to pay fees. If it is found that a person has failed to pay fees assessed by this chapter, the director will enforce the collection of the delinquent fees. A person required to pay fees as required by Iowa Code section 455B.310 who fails or refuses to pay fees by the due date shall be assessed a penalty of 15% of the fee due.

Mr. Stokes distributed copies of the proposed rules and explained same.

Nancylee Siebenmann asked about (e) on page 2, as to whether this would apply only to county landfills which would eliminate any reference to municipalities.

Mr. Stokes stated that he will check to be sure that language is correct. He added that the intent is that the rule would apply to any publicly owned landfill.

This was an informational item; no action was required.

PROPOSED CONTESTED CASE DECISION--EAST SIDE ACRES

Mike Murphy, Bureau Chief, Legal Services Bureau, presented the following item.

On August 4, 1989, the department issued Administrative Order 89-WS-48 to East Side Acres, Gary Kollbaum, Owner. That action required completion of new water main by August 31, 1989, to achieve compliance with the nitrate maximum contaminant level at this public water supply; to comply with that MCL thereafter; to perform required monitoring and other provisions; and to pay a \$600.00 penalty. That action was appealed and the matter proceeded to administrative hearing on November 21, 1989, and January 5, 1990. The hearing officer issued the attached Proposed Findings of Fact, Conclusions of Law, and Order on January 23, 1990. The decision affirms the Administrative Order.

Either party may appeal the Proposed Decision to the Commission. In the absence of an appeal, the Commission may decide on its own motion to review the Proposed Decision. If there is no appeal or review of the Proposed Decision, it automatically becomes the final decision of the Commission.

Mr. Murphy presented a history of this case.

The Commission took no action; this has the effect of upholding the hearing officer's decision unless there is an appeal.

PROPOSED CONTESTED CASE DECISION--CRAIG NATVIG

Mike Murphy, Bureau Chief, Legal Services Bureau, presented the following item.

On September 21, 1989, the department issued Administrative Order 89-SW-21 to Craig Natvig. That action required Mr. Natvig to cease the accumulation, storage, and shredding of waste tires without a permit, to properly dispose of waste tires already accumulated, and to pay a penalty of \$1000. That action was appealed and the matter proceeded to administrative hearing on January 26, 1990. The Administrative Law Judge issued the attached Proposed Findings of Fact, Conclusions of Law, and Order on February 7, 1990. The decision affirms the department's Order, with the exception of reducing the penalty to \$750.

Either party may appeal the Proposed Decision to the Commission. In the absence of an appeal, the Commission may decide on its own motion to review the Proposed Decision. If there is no appeal or review of the Proposed Decision, it automatically becomes the final decision of the Commission.

Mr. Murphy presented a history of this case.

The Commission took no action; this has the effect of upholding the hearing officer's decision unless there is an appeal.

APPEAL OF CONTESTED CASE DECISION--CHARLES CLAPP

Mike Murphy, Bureau Chief, Legal Services Bureau, presented the following item.

On August 4, 1989, the department issued Administrative Order 89-UT-09 to Charles Clapp. That action directed him to submit and implement soils and groundwater contamination investigation and remediation plans. That action was appealed and the matter proceeded to administrative hearing on October 31, 1989. The hearing officer issued the Proposed Findings of Fact, Conclusions of Law, and Order on November 9, 1989. The decision affirms the Order.

Mr. Clapp has appealed this order to the Commission. The Proposed Decision, the appeal letter, and the department's response will be distributed to the Commissioners. The entire record, including hearing tapes and exhibits are available for your review. The parties may be available to argue their respective positions and respond to your questions. You may then affirm the Proposed Decision, or modify or reverse it, substituting your own findings of fact and conclusions of law based on your conclusions from your review of the record and legal argument.

Mr. Murphy presented a history of this case. He explained that Mr. Clapp requested an appeal and a letter was sent informing him that it would be considered at this meeting. Additionally, he was informed that if he wanted to make a presentation he

should let staff know prior to ten days before the meeting. The department has not heard from Mr. Clapp.

Motion was made by Margaret Prahl to affirm the hearing officer's decision. Seconded by Mike Earley. Motion carried unanimously.

SOO LINE REFERRAL (removed from table in January)

Mike Murphy, Bureau Chief, Legal Services Bureau, presented the following item.

Mr. Murphy reminded the Commission that this item was tabled in December as staff was working on a settlement with the company. He noted that it was removed from the table at the January meeting but was not discussed at that time. Mr. Murphy stated that Soo Line has submitted the site assessment plan that they agreed to do. The plan has been approved and a draft Administrative Consent Order has been sent to take care of the rest of the investigation. Follow-up will be done regarding the remediation aspect of the site. Mr. Murphy noted that this should be finalized in the near future and staff will probably issue an Administrative Order soon. Staff will then ask that the referral be withdrawn next month.

Motion was made by Margaret Prahl to table the Soo Line referral until staff brings the item back before the Commission. Seconded by Nancy Lee Siebenmann. Motion carried unanimously.

REFERRALS TO THE ATTORNEY GENERAL

The Director requests the referral of the following to the Attorney General for appropriate legal action. Litigation reports have been provided to the Commissioners and are confidential pursuant to Iowa Code section 22.7(4).

Don Carolan/Hanson Tire Service (Ridgeway/Cresco) - solid waste/air
Waltermann Implement, Inc. (Dike) - underground tanks
Van Diest Supply Co. (Webster City) - air
Mathern/Beck/Walker Oil Co. (Garwin) - petroleum release
DeWitt Moose Lodge (DeWitt) - water supply/penalty
Timber Lake Estates (Swisher) - penalty
Darlo Schaap (Sioux Center) - solid waste/penalty
Siouxland Quality Meat Co. (Sioux City) - wastewater
City of Fairfield - wastewater

Don Carolan/Hanson Tire Service

Mr. Murphy briefed the Commission on the history of this case. He noted that Mr. Carolan has been very cooperative and is continuing with cleanup of the dump, and because of his cooperation it should weigh in his favor insofar as the ultimate result. Staff has not heard anything from Hanson Tire Service.

Motion was made by Rozanne King for referral to the Attorney General's Office. Seconded by Mike Earley. Motion carried unanimously.

DeWitt Moose Lodge

Mr. Murphy stated that this party still has not taken the nitrate sample that was ordered, and in addition they had serious deficiencies in 1989 regarding their bacterial monitoring which violated another order issued in 1988. He stated that referral is sought for an injunction to require that the monitoring for nitrate bacteria be obtained, for the collection of the penalty, and for an additional civil penalty.

Motion was made by Nancylee Siebenmann for referral to the Attorney General's Office. Seconded by Mike Earley. Motion carried unanimously.

Timber Lake Estates

Mr. Murphy briefed the Commission on the history of this case.

Motion was made by Margaret Prael for referral to the Attorney General's Office. Seconded by Gary Priebe. Motion carried unanimously.

Darlo Schaap

Mr. Murphy briefed the Commission on the history of this case.

He noted that the department was just contacted by Mr. Schaap's attorney, who indicated that he would submit a proposal to get Mr. Schaap into compliance. If this is done, the department will attempt to work out a consent decree, but the matter should be referred.

Motion was made by Richard Hartsuck for referral to the Attorney General's Office. Seconded by Nancylee Siebenmann. Motion carried unanimously.

Van Diest Supply Co.

Nancylee Siebenmann asked why this referral was pulled off the agenda.

Mr. Murphy explained that this case was to be deleted from the agenda as Mr. Van Diest requested an extension of time to meet requirements of the department. Since there was a misunderstanding in regards to a letter from the department on what needed to be done, the extension was granted. Mr. Murphy related that Mr. Van Diest had done some work the department did not know about, and it was felt that the case could be handled administratively.

LEGISLATION UPDATE

James Combs, Division Administrator, Coordination and Information Division, presented the following item.

IOWA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION COMMISSION
HOUSE FILES

HF 0086

By Schrader.

A bill for an act relating to the reimbursement paid redemption centers and dealers for beverage containers.

Jan. 19 89 Introduced, referred to Energy and Environmental Protection. H.J. 187.

Jan. 24 89 Subcommittee, Schrader, Bisignano and Lundby. H.J. 246.

Mar. 10 89 Committee report. H.J. 761.

Mar. 10 89 Recommended passage. H.J. 761.

Apr. 12 89 Rereferred to Energy and Environmental Protection.

H.J. 1471.

* * * * * END OF 1989 ACTIONS * *

* * *

Jan. 15 90 Subcommittee reassigned, Schrader, Lundby and Neuhauser.

H.J. 82.

HF 0229

By Schrader.

A bill for an act relating to the purchase of certain degradable and biodegradable products by the department of general services, the state

board of regents, the state department of transportation,
and the
commission for the blind.

Feb. 07 89 Introduced, referred to Energy and Environmental
Protection. H.J. 336.

Feb. 09 89 Subcommittee, Schrader, Bisignano, McKean,
Nielsen and
Siegrist. H.J. 376.

* * * * * END OF 1989 ACTIONS * *

* * *

Jan. 15 90 Subcommittee reassigned, Schrader, McKean,
Neuhauser,
Nielsen and Siegrist. H.J. 82.

HF 0243

By Jesse.

A bill for an act relating to the requirement of a permit
for disposal of
municipal sewer sludge. (See Cmte. Bill HF 714).

Feb. 08 89 Introduced, referred to Energy and Environmental
Protection. H.J. 350.

Feb. 09 89 Subcommittee, Jesse, Banks and Garman. H.J. 376.

Feb. 14 89 Subcommittee reassigned, Jesse, Banks, Bisignano,
Garman and Schrader. H.J. 445.

* * * * * END OF 1989 ACTIONS * *

* * *

Jan. 15 90 Subcommittee reassigned, Jesse, Banks, Garman,
Neuhauser and Schrader. H.J. 82.

HF 0277

By Hatch.

A bill for an act relating to the establishment of a state
environmental
policy and requiring certain activities by governmental
units regarding
the state environmental policy and its implementation.
(See Cmte. Bill
HF 2417).

Feb. 10 89 Introduced, referred to Energy and Environmental
Protection. H.J. 380.

Feb. 14 89 Subcommittee, Rosenberg, Hatch and McKean. H.J.
446.

* * * * * END OF 1989 ACTIONS * *

* * *

Jan. 18 90 Subcommittee reassigned, Hatch, McKean, Nielsen,
Petersen of Muscatine and Rosenberg.

Jan. 29 90 Fiscal note. HCS.

HF 0282

By Schrader.

A bill for an act relating to the effective date for the provision of tax incentives for the sale and use of degradable bags used as point-of-sale packaging.

Feb. 10 89 Introduced, referred to Energy and Environmental Protection. H.J. 381.

Feb. 13 89 Subcommittee, Schrader, Bisignano, McKean, Nielsen and Siegrist. H.J. 434.

Mar. 10 89 Committee report. H.J. 761.

Mar. 10 89 Recommended passage. H.J. 761.

Mar. 30 89 Amendment H. 3725 filed. H.J. 1148.

Mar. 31 89 Amendment H. 3725 adopted. H.J. 1164.

Mar. 31 89 Passed House, ayes 68, nays 24. H.J. 1164.

Apr. 03 89 Explanations of votes. H.J. 1209.

Apr. 04 89 Message from House. S.J. 1163.

Apr. 04 89 Read first time, passed on file. S.J. 1163.

Apr. 04 89 Referred to Environment and Energy Utilities. S.J. 1182.

Apr. 05 89 Subcommittee, Sturgeon, Carr and Soorholtz. S.J. 1194.

Apr. 07 89 Committee report. S.J. 1257.

Apr. 07 89 Without recommendation. S.J. 1257.

Apr. 14 89 Placed on calendar under unfinished business. S.J. 1440.

Apr. 18 89 Amendment S. 3751 filed. S.J. 1519.

May 07 89 Referred to Environment and Energy Utilities. S.J. 2095.

* * * * * END OF 1989 ACTIONS * *

* * *

Jan. 10 90 Subcommittee, Sturgeon, Connolly and Soorholtz. S.J. 75.

HF 0302

By Osterberg.

A bill for an act relating to the testing of public and regional water systems, and making penalties applicable. (See Cmte. Bill HF 598).

Feb. 14 89 Introduced, referred to Energy and Environmental Protection. H.J. 436.

Feb. 16 89 Subcommittee, Osterberg, Bisignano and Petersen
of Muscatine. H.J. 504.

* * * * * END OF 1989 ACTIONS * *

* * *

Jan. 15 90 Subcommittee reassigned, Osterberg, Neuhauser and
Petersen of Muscatine. H.J. 82.

HF 0308

By Halvorson of Webster.

A bill for an act relating to the required acceptance of
empty beverage

containers by dealers and distributors.

Feb. 14 89 Introduced, referred to Energy and Environmental
Protection. H.J. 437.

Feb. 16 89 Subcommittee, Schrader, Bisignano, McKean,
Nielsen and Siegrist. H.J. 504.

* * * * * END OF 1989 ACTIONS * *

* * *

Jan. 15 90 Subcommittee reassigned, Schrader, McKean,
Neuhauser, Nielsen and Siegrist. H.J. 82.

HF 0600

By Energy and Environmental Protection.

A bill for an act relating to the protection of water
quality, including
the establishment of protected areas, and providing a
penalty. (HSB 53).

Mar. 14 89 Introduced, placed on calendar. H.J. 774.

Mar. 21 89 Amendment H. 3522 filed. H.J. 920.

Mar. 22 89 Amendment H. 3522 adopted. H.J. 936.

Mar. 22 89 Point of order raised, invoked Joint Rule 17,
req. fiscal
note. H.J. 936.

Mar. 22 89 Deferred, retained on calendar. H.J. 936.

Mar. 22 89 Amendments H. 3533, H. 3534, H. 3540, H. 3544, H.
3553
filed. H.J. 963.

Mar. 22 89 Fiscal note. HCS.

Mar. 23 89 Amendment H. 3544 withdrawn. H.J. 984.

Mar. 23 89 Amendment H. 3553 lost. H.J. 984.

Mar. 23 89 Rule 31.8 suspended H.J. 985.

Mar. 23 89 Amendment H. 3561 filed. H.J. 985.

Mar. 23 89 Amendment H. 3561 adopted. H.J. 985.

Mar. 23 89 Ruled out of order H. 3533, H. 3534, H. 3540.
H.J. 985.
Mar. 23 89 Passed House, ayes 73, nays 23. H.J. 985.
Mar. 27 89 Explanations of votes. H.J. 1026.
Mar. 27 89 Motion filed to reconsider vote. H.J. 1023.
Mar. 28 89 Amendments H. 3648, H. 3653 filed. H.J. 1066.
Apr. 03 89 Motion to reconsider vote failed. H.J. 1207.

Apr. 03 89 Ruled out of order H. 3648, H. 3653. H.J. 1207.
Apr. 04 89 Message from House. S.J. 1157.
Apr. 04 89 Read first time, passed on file. S.J. 1157.
Apr. 04 89 Referred to Environment and Energy Utilities.
S.J. 1183.
Apr. 05 89 Subcommittee, Varn, Miller and Hedge. S.J. 1194.
Apr. 07 89 Committee report. S.J. 1257.
Apr. 07 89 Recommended amendment, passage. S.J. 1257.
Apr. 07 89 Committee amendment S. 3603 filed. S.J. 1257.
Apr. 13 89 Placed on calendar under unfinished business.
S.J. 1429.
Apr. 27 89 Amendment S. 3976 filed. S.J. 1742.

May 05 89 Amendments S. 4148, S. 4160 filed. S.J. 2010.
May 07 89 Referred to Environment and Energy Utilities.
S.J. 2095.
May 06 89 Amendment S. 4179 filed. S.J. 2106.

* * * * * END OF 1989 ACTIONS * *

* * *

Jan. 10 90 Subcommittee, Sturgeon, Miller and Hedge. S.J.
75.

HF 0714

By Energy and Environmental Protection.

A bill for an act relating to the prohibition of certain
sewage ash at a
sanitary landfill or other off-premises facilities.
(Formerly HF 243).

Mar. 22 89 Introduced, placed on calendar. H.J. 940.
Mar. 28 89 Passed House, ayes 93, nays 2. H.J. 1062.
Mar. 29 89 Explanation of vote. H.J. 1110.
Mar. 30 89 Explanation of vote. H.J. 1146.
Mar. 30 89 Message from House. S.J. 1081.
Mar. 30 89 Read first time, passed on file. S.J. 1081.
Mar. 30 89 Referred to Environment and Energy Utilities.
S.J. 1098.
Apr. 04 89 Subcommittee, Varn, Miller and Hedge. S.J. 1161.
* * * * * END OF 1989 ACTIONS * *

* * *

Jan. 10 90 Subcommittee, Sturgeon, Deluhery and Hedge. S.J.
76.

HF 0719

By Energy and Environmental Protection.

A bill for an act relating to the elimination of the environmental protection commission. (HSB 327).

Mar. 22 89 Introduced, placed on calendar. H.J. 957.

Mar. 30 89 Passed House, ayes 51, nays 48. H.J. 1122.

Mar. 30 89 Motion filed to reconsider vote. H.J. 1123.

Mar. 30 89 Motion to reconsider failed. H.J. 1123.

Mar. 30 89 Message from House. S.J. 1095.

Mar. 30 89 Read first time, passed on file. S.J. 1095.

Mar. 30 89 Referred to Environment and Energy Utilities.

S.J. 1098.

Apr. 04 89 Subcommittee, Gronstal, Sturgeon and Pate. S.J. 1161.

* * * * * END OF 1989 ACTIONS * *

* * *

Jan. 10 90 Subcommittee, Gronstal, Sturgeon and Pate. S.J. 76.

HF 2037

By Fuller and Svoboda.

A bill for an act relating to disposal of solid waste on agricultural land and making penalties applicable.

Jan. 10 90 Introduced, referred to Energy and Environmental Protection. H.J. 51.

Jan. 18 90 Subcommittee, Shoultz, Dvorsky, Garman, Hanson of Delaware, Jesse, May and Siegrist.

HF 2049

By De Groot.

A bill for an act extending eligibility dates for certain benefits from the comprehensive petroleum underground storage tank fund.

Jan. 11 90 Introduced, referred to Energy and Environmental Protection. H.J. 63.

Jan. 16 90 Subcommittee, Hatch, Adams, Hanson of Delaware, Lundby, Osterberg, Shoultz and Trent.

HF 2069

By Hatch.

A bill for an act relating to the adoption of environmental standards by the department of natural resources.

Jan. 15 90 Introduced, referred to Energy and Environmental Protection. H.J. 73.

HF 2070

By Shoultz.

A bill for an act conditioning the receipt of certain business assistance upon the completion of a waste review by the Iowa waste reduction center.

Jan. 15 90 Introduced, referred to Energy and Environmental Protection. H.J. 73.

Jan. 18 90 Subcommittee, Shoultz, Dvorsky, Garman, Hanson of Delaware, Jesse, May and Siegrist.

HF 2075

By Svoboda.

A bill for an act relating to the development and implementation of a discarded tire recovery program and establishing a fee.

Jan. 15 90 Introduced, referred to Energy and Environmental Protection. H.J. 74.

Jan. 18 90 Subcommittee, Shoultz, Dvorsky, Garman, Hanson of Delaware, Jesse, May and Siegrist.

HF 2076

By Stueland and Ollie.

A bill for an act making an appropriation to the department of natural resources for certain environmental protection projects.

Jan. 15 90 Introduced, referred to Appropriations. H.J. 74.

Jan. 24 90 Subcommittee, Peterson of Carroll, Jochum and Halvorson of Clayton. H.J. 168.

Feb. 01 90 Amendment H. 5072 filed. H.J. 271.

HF 2106

By Black.

A bill for an act relating to the prohibition of the manufacture,
offering for sale, selling, or use of polystyrene packaging products or food service items, and providing a penalty.

Jan. 17 90 Introduced, referred to Energy and Environmental Protection. H.J. 97.

Jan. 18 90 Subcommittee, Shoultz, Dvorsky, Garman, Hanson of Delaware,
Jesse, May and Siegrist.

HF 2115

By Pellett and Harbor.

A bill for an act regulating the commercial cleaning of private sewage disposal facilities, by providing for the adoption of standards and the

issuance of licenses, providing license fees, providing a civil penalty,
and providing effective and applicability dates.

Jan. 17 90 Introduced, referred to Energy and Environmental Protection. H.J. 99.

Jan. 18 90 Subcommittee, Jesse, May and Trent. H.J. 111.

Feb. 16 90 Committee report. H.J. 417.

Feb. 16 90 Recommended amendment, passage. H.J. 417.

Feb. 16 90 Committee amendment H. 5168 filed. H.J. 424.

HF 2123

By Svoboda.

A bill for an act relating to the establishment of a state hazardous waste incinerator, and providing for an appropriation.

Jan. 18 90 Introduced, referred to Energy and Environmental Protection. H.J. 106.

Jan. 19 90 Subcommittee, Shoultz, Dvorsky, Garman, Hanson of Delaware,
Jesse, May and Siegrist.

HF 2128

By Rosenberg.

A bill for an act relating to the waste volume reduction and recycling

duties of cities and counties, and increasing the solid waste tonnage fee.

Jan. 18 90 Introduced, referred to Energy and Environmental Protection. H.J. 107.

Jan. 19 90 Subcommittee, Shoultz, Dvorsky, Garman, Hanson of Delaware, Jesse, May and Siegrist.

HF 2137

By Rosenberg, Nielsen and Dvorsky.

A bill for an act to require a business, as a condition of the receipt of state financial assistance for economic development purposes, to meet certain requirements relating to federal and state environmental protection laws and the disposal of solid and hazardous waste.

Jan. 19 90 Introduced, referred to Energy and Environmental Protection. H.J. 114.

Jan. 26 90 Subcommittee, Nielsen, Dvorsky and McKean. H.J. 219.

HF 2139

By Jesse, Brown and Hatch.

A bill for an act relating to the establishment of an environmental imperilment trust fund, and establishing fees.

Jan. 19 90 Introduced, referred to Energy and Environmental Protection. H.J. 114.

Jan. 26 90 Subcommittee, Jesse, Johnson, Lundby, Rosenberg and Trent. H.J. 219.

HF 2155

By Natural Resources & Outdoor Recreation.

A bill for an act relating to the designation, inventory, and protection of wetland, providing a civil penalty for violations, and providing a property tax exemption for wetlands. (HSB 539).

Jan. 23 90 Introduced, referred to Ways and Means. H.J. 144.

Jan. 24 90 Subcommittee, Osterberg, Bennett and Rosenberg.
H.J. 169.
Jan. 30 90 Fiscal note. HCS.

HF 2162

By Murphy.

A bill for an act relating to the payment of private water
supply well
testing fees.

Jan. 24 90 Introduced, referred to Energy and Environmental
Protection. H.J. 151.

Jan. 26 90 Subcommittee, May, Garman and Schrader. H.J. 220.

HF 2168

By Poncy.

A bill for an act relating to abandoned wells and making
penalties
applicable.

Jan. 25 90 Introduced, referred to Energy and Environmental
Protection. H.J. 171.

Jan. 26 90 Subcommittee, May, Garman and Schrader. H.J. 220.

HF 2170

By Gruhn and Osterberg.

A bill for an act relating to the prohibition of the use
of certain
pesticides, and making a penalty applicable.

Jan. 25 90 Introduced, referred to Agriculture. H.J. 171.

Jan. 31 90 Subcommittee, Muhlbauer, Branstad and McKinney.
H.J. 254.

Feb. 15 90 Committee report. H.J. 407.

Feb. 15 90 Recommended amendment, passage. H.J. 407.

Feb. 15 90 Committee amendment H. 5152 filed. H.J. 411.

HF 2186

By Beaman, Daggett, Garman, Osterberg and Johnson.

A bill for an act relating to the reporting of a hazardous
condition
involving a hazardous substance to the department of
natural resources,
to the local law enforcement agency, and to operators of
affected public
or private water supply systems.

Jan. 26 90 Introduced, referred to Energy and Environmental Protection. H.J. 207.

Jan. 30 90 Subcommittee, Adams, Banks and May. H.J. 236.

HF 2189

By Kremer.

A bill for an act relating to the issuance of general permits for environmental quality control purposes by the department of natural

resources, and subjecting violators to existing penalties.

Jan. 26 90 Introduced, referred to Energy and Environmental Protection. H.J. 208.

Jan. 30 90 Subcommittee, Adams, Holveck and Siegrist. H.J. 236.

HF 2197

By De Groot.

A bill for an act relating to reporting ingredients of pesticides, making penalties applicable, and providing penalties.

Jan. 26 90 Introduced, referred to Agriculture. H.J. 209.

Feb. 06 90 Subcommittee, Johnson, Bennett and Koenigs. H.J. 321.

HF 2199

By Agriculture.

A bill for an act relating to agricultural drainage wells and providing an effective date. (HSB 555).

Jan. 26 90 Introduced, placed on calendar. H.J. 218.

Feb. 02 90 Passed House, ayes 85, nays none. H.J. 285.

Feb. 05 90 Message from House. S.J. 356.

Feb. 05 90 Read first time, passed on file. S.J. 356.

Feb. 05 90 Referred to Agriculture. S.J. 359.

Feb. 13 90 Committee report. S.J. 497.

Feb. 13 90 Recommended passage. S.J. 497.

HF 2220

By Stueland.

A bill for an act relating to pollution prevention and reduction.

Jan. 30 90 Introduced, referred to Energy and Environmental Protection. H.J. 233.

Jan. 31 90 Subcommittee, Schrader, May and Siegrist. H.J. 255.

HF 2225

By Corbett, Banks, Lundby, Renken, Hanson of Delaware, Metcalf, Diemer, Tyrrell, Kremer, Lageschulte, Pellett, Stueland, Eddie, McKean, Iverson, Shoning, Siegrist, Trent, Hermann and Maulsby.

A bill for an act relating to the establishment of permanent household hazardous waste collection programs.

Jan. 31 90 Introduced, referred to Energy and Environmental Protection. H.J. 238.

Feb. 01 90 Subcommittee, Osterberg, Hanson of Delaware and Nielsen.
H.J. 269.

HF 2257

By Petersen of Muscatine, Tyrrell, Bennett, Branstad, Schneklath, Renken, Banks, Maulsby, Siegrist, Eddie, Stueland, Pellett, De Groot, McKean and Hanson of Delaware.

A bill for an act relating to surface water quality protection.

Feb. 02 90 Introduced, referred to Energy and Environmental Protection. H.J. 273.

Feb. 07 90 Subcommittee, Johnson, Banks, McKean, Neuhauser, Osterberg, Petersen of Muscatine and

HF 2260

By Kremer.

A bill for an act relating to the burial of domesticated animal carcasses on agricultural land, making penalties applicable, and providing an effective date.

Feb. 02 90 Introduced, referred to Agriculture. H.J. 273.

Feb. 06 90 Subcommittee, May, Branstad and Fogarty. H.J. 322.

HF 2299

By Harper, May, Teafood, Adams, Diemer, Shoultz, Gruhn and Fogarty.

A bill for an act relating to the funding and scope of the Iowa waste reduction center for the safe and economic management of solid waste and hazardous substances.

Feb. 06 90 Introduced, referred to Energy and Environmental Protection. H.J. 310.

Feb. 07 90 Subcommittee, Shoultz, Dvorsky, Garman, Hanson of Delaware, Jesse, May and Siegrist.

HF 2340

By Agriculture.

A bill for an act providing for disposal of dead sheep or poultry, and providing an effective date. (HSB 681).

Feb. 08 90 Introduced, placed on calendar. H.J. 339.

Feb. 15 90 Fiscal note. HCS.

Feb. 16 90 Amendment H. 5170 filed. H.J. 424.

HF 2401

By Energy and Environmental Protection.

A bill for an act relating to the reporting of a hazardous condition involving a hazardous substance to the department of natural resources, to the local law enforcement agency, and to operators of affected public or private water supply systems.

Feb. 13 90 Introduced, placed on calendar. H.J. 372.

HF 2412

By Ollie, Stueland, Beatty, Johnson, Rosenberg, Eddie, Trent, Plasier and Osterberg.

A bill for an act providing for the enactment of municipal infractions relating to the environment and providing penalties.

Feb. 14 90 Introduced, referred to Energy and Environmental Protection. H.J. 379.

Feb. 14 90 Subcommittee, Adams, Holveck and Trent. H.J. 391.

Feb. 16 90 Committee report. H.J. 418.

Feb. 16 90 Recommended passage. H.J. 418.

HF 2417

By Energy and Environmental Protection.

A bill for an act relating to the establishment of a state environmental policy and establishing certain requirements relating to the state environmental policy and its implementation. (Formerly HF 277).

Feb. 14 90 Introduced, placed on calendar. H.J. 380.

Mr. Combs distributed copies of bills of interest to the Commission showing the current status of each. He expanded on details of some of the bills.

Mr. Combs stated that Ted Yanacek, representative of the Farm Bureau, is present and would like to make a few comments on the bill relating to the disposal of farm waste.

TED YANACEK - FARM BUREAU

Ted Yanacek, lobbyist for the Farm Bureau, reported that this year he has had an extraordinary amount of questions from legislators about what is happening with respect to the EPC rules on solid waste disposal, and on disposal of dead animals. Mr. Yanacek suggested that Allan Stokes provide a briefing tomorrow on the rules staff will propose to the Commission in March, so that he can tell legislators what EPC will be proposing and their proposed legislative bills can then be put to rest.

Mr. Yanacek explained that some of the legislature is contemplating individual permitting rather than a generic permit for on-farm disposal of dead animals. He added that the permitting can be provided through rulemaking.

UPDATE - DON ERVIN

Chairperson Mohr asked staff for an update on the meeting with Don Ervin.

Mr. Stokes provided updated information on this situation. He stated that Mr. Ervin is proposing to do tire recycling and make powder out of the tires to use in recapping, and he did this without a permit. Staff has met with Mr. Ervin and provided information for the necessary permits and requirements. Mr. Ervin indicated he would send his permit application to the department within 30 days. Mr. Stokes pointed out that if his facility is not in compliance within 60 days he will have to cease taking in tires. He can then remove tires off site, but cannot add any. If a permit has not been approved and issued within 120 days, all tires will have to be removed from the area. The department has agreed to an Administrative Consent Order with Mr. Ervin.

RECESS

Chairperson Mohr recessed the meeting at 5:30 p.m., Monday, February 19, 1990.

MEETING RECONVENES 8:30 A.M., TUESDAY, FEBRUARY 20, 1990BRIEFING, ON-SITE DISPOSAL OF FARM WASTE

Mr. Stokes distributed copies of proposed rules for on-site disposal of farm waste along with copies of the responsiveness summary for same. He explained changes made as a result of public comments and a meeting with representatives of the Farm Bureau and poultry and livestock associations. He noted that the final rule on this topic will be brought for the Commission's approval next month. Mr. Stokes stated that the only thing not addressed in these rules is the burning of out-buildings.

Clark Yeager requested that staff bring a proposal for the burning of buildings.

It was the consensus of the Commission that they would like to look at a proposal for burning buildings, but they are not sure they would support it.

APPOINTMENT - FRED IBEN (Referral to A.G. in November 1989)

Mike Murphy, Bureau Chief, Legal Services Bureau, presneted the following item.

Mr. Murphy stated that this matter was considered by the Commission in November 1989 and was referred to the Attorney General at that time. Mr. Murphy reviewed the case noting that it involves an inappropriate solid waste disposal at Mr. Iben's campground in Jones County. An Administrative Order was issued in 1988, and in August 1989 it was learned that dumping again took place in an excavation near a floodplain. It also involved some contamination of water at that time. Mr. Murphy reminded the Commission that Mr. Iben could not attend the Commission meeting in November, but he sent a letter indicating that he did not do the dumping and somebody else had done it. He related that he cleaned it up and had taken steps to keep dumping from reoccurring as best he could. The Commission considered those facts and referred the case. Mr. Murphy stated that Mr. Iben has recently been dealing with the Attorney General's Office and he expressed a desire to come and speak to the Commission.

APPOINTMENT - CHIP LOWE

Chip Lowe, Attorney for Fred Iben, presented background information on Fred Iben and the campground he operates in Monticello, Iowa. He circulated photos showing the area where the campground is located. Mr. Lowe stated that in 1980, Mr. Iben sought permission from DWAWM to put the campground in the floodplain area. He displayed engineering plans Mr. Iben submitted at that time showing where the campground borders the Maquoketa River, and where the campground entrance is off Highway 38. Mr. Lowe stated that the problem deals with a tract of land at the area which adjoins the Maquoketa River east of Highway 38, and where the State had taken out dirt for fill on the highway. It was Mr. Iben's intention to fill in this area and plant grass on it. Mr. Lowe related that there have been several occasions when people have dumped garbage there without permission. Additionally, the individual who dumped garbage there last summer was a person Mr. Iben had hired to take the garbage from the campground to the dumpsite, and while Mr. Iben was gone for the weekend this individual dumped the garbage there. Mr. Iben took the steps to remove the garbage. Mr. Iben paid a fine on an Administrative Order two years prior to that. His intention is to fill in the area and it should be completed by July, 1990. Mr. Lowe specified that this was not a case of household garbage being dumped for fill. He added that Mr. Iben is willing to work with Joe Sanfilippo to make sure that there is nothing illegal, improper, and that no pollution takes place. In conclusion, Mr.

Lowe asked the Commission to reconsider the referral and handle it as an administrative matter.

Nancylee Siebenmann asked if Mr. Iben has posted signs or put up any barriers to dumping.

Mr. Iben responded that he now has barriers there and he is going to put up a big fence with railroad timbers and cables.

Margaret Prah1 commented that she is not sure the Commission has authority to do anything since this has already been referred to the Attorney General, and she related that she would like to hear from Mike Murphy about what the Commission's authority is.

Mr. Murphy stated that the Attorney General is free to act on any opinion expressed by the Commission.

Gary Priebe asked why the department does not go after the person who put the garbage there.

Mike Earley commented that Mr. Iben can go after the person who put the garbage there, adding that the department and Commission have spent five hours on this because Mr. Iben was too busy in November to send a lawyer to represent him, and he feels that "no action" should be the Commission's decision.

Gary Priebe stated that he feels Mr. Iben has gone the full route trying to do things right. He added that he has a problem with trying to prosecute people who have had garbage dumped on their property when they are not the person who did it. Commissioner Priebe stated that he would like to see a letter sent to the Attorney General to see if there is something that can be done to get this matter cleared up.

Motion was made by Gary Priebe that staff address a letter to the Attorney General requesting that this case be handled with no more than an Administrative Order penalty, and sign a consent decree giving Mr. Iben a date for completion of the fill project and that Mr. Iben contact the local DNR office for supervision of the project. Seconded by William Ehm.

Mr. Murphy stated that completion of the project is not involved, the issue is a matter of inappropriate solid waste disposal. He added that we could include special measures needed to help prevent dumping.

Mike Earley commented that he finds it curious that someone can come in and state that they are now going to abide by the law which they should have been doing, and which they are required to do anyway, and it would encourage the Commission to support that activity. He added that he objects to what the Commission is doing.

Margaret Prahl commented that the Commission is merely making a recommendation to the Attorney General.

Chairperson Mohr requested a roll call vote on Gary Priebe's motion. "Aye" vote was cast by Commissioners Ehm, Hartsuck, King, Prahl, Priebe, Siebenmann, Yeager, and Mohr. "Nay" vote was cast by Commissioner Earley. Motion carried on a vote of 8-Aye to 1-Nay.

Discussion followed regarding the procedure used to notify an individual when a case is being referred.

City of Fairfield

Mr. Murphy briefed the Commission stating that the City has had continuing problems at it's wastewater facilities and referral is being sought for an injunction to require compliance, particularly with discharge limitations and for requirements to monitor and limit one of it's industries, the Dexter Company. Appropriate civil penalty is also being sought. Mr. Murphy noted that the city's wastewater facility was completed in 1985, the city had problems meeting ammonia nitrogen discharge limits. In 1986 an Administrative Order was issued regarding same. Over the next two years compliance was sporadic and in 1988 another Administrative Order was issued (with a \$1000 penalty). In the next year and one-half the city still had ammonia violations and monitoring requirements were not met. Mr. Murphy explained that part of the problem is Dexter Company's impact on the city's system. He added that the department has previously been dealing with the city, but staff is now anticipating enforcement action with Dexter Company.

APPOINTMENT - JOHN BROWN

John Brown, Administrative Coordinator for the City of Fairfield, introduced others who were with him. He explained that the city underwent extensive renovations to their wastewater treatment system several years ago. In the beginning, the new system did not function properly because it was not getting proper nitrification to break down ammonia. That was traced back to the zinc concentration coming from the Dexter Company. He stated that, to his knowledge, the city is meeting all monitoring requirements on the Dexter Company. Some of the monitoring is contracted out to a lab and they are always working a little bit behind. Mr. Brown noted that Dexter Company has gone through four different pretreatment processes trying to get zinc concentrations under control. He distributed hand-outs showing ammonia discharge figures for the city for 1988 and 1989 along with a list of Dexter Company's permit violations for 1988. Mr. Brown stated that in October 1989, the city informed Dexter Company of violations and levied a \$400 fine against them. The

city required Dexter to submit a plan for an engineering firm to assist in their waste problems. The company retained an engineer, but he was killed in a car accident in January. Mr. Brown related that in January, 1989 the Dexter Company informed the city that they had contracted with Howard Green Company to make recommendations to improve their waste system. In conclusion, Mr. Brown pointed out that the city and Dexter have tried to work together on this and if the Commission takes action he would suggest it be a joint action. He requested that the Commission defer any action for six months.

Discussion followed regarding the city just now coming into compliance after three and one-half years from the first Administrative Order; enforcement possibilities against Dexter Company; and Dexter Company's noncompliance.

Motion was made by Margaret Prahl for referral to the Attorney General's Office with the recommendation that the fine be on the lower side of the scale just to encourage compliance. She commented that more time does not seem to be a solution to the problem, it seems the city has had the ability to solve the problem through a series of penalties and has not chosen to do so. Seconded by Rozanne King.

Mike Earley stated that he agrees with the referral but feels it is unfortunate that the Commission would make a recommendation that the penalty be softened. He added it this is a profit corporation that is the beneficiary of this insult to the environment, and it is his feeling the full penalty should be passed on to the city in hopes that they would pass it back to the for-profit corporation, the true beneficiary of what has happened to the environment.

Motion was made by Richard Hartsuck to amend Commissioner Prahl's motion to delete the portion which recommends that the fine be on the lower side of the scale. Seconded by William Ehm.

Chairperson Mohr requested a roll call vote on the amendment. "Aye" vote was cast by Commissioners Earley, Ehm, Hartsuck, King, and Siebenmann. "Nay" vote was cast by Commissioners Prahl, Priebe, Yeager, and Mohr. Motion carried on a vote of 5-Aye to 4-Nay.

Vote on Commissioner Prahl's motion to refer carried unanimously.

Mathern/Beck/Walker

Mr. Murphy briefed the Commission stating that this matter involves Larry's D-X in Garwin, Iowa. He noted that Larry Mathern is the owner of the station and Walker Oil Company is the registered owner of the tanks. Ralph Beck is the owner of adjacent property in which underground tanks were also located. He stated that in 1987, the department learned of a release of

gasoline at Larry's D-X. The investigation disclosed that not only had this release taken place but two tanks had been removed from the Beck property and there had been spillage of gasoline at that time. Mr. Murphy added that the department attempted to get the parties to conduct the appropriate site assessment and cleanup. In 1988, an Administrative Order was issued requiring the assessment and cleanup, and the order was not appealed or obeyed. He noted that without submitting a plan or getting approval, the parties have taken some action to excavate a large portion of the soil, but groundwater samples still show contamination. Staff is seeking referral to see that the appropriate site assessment is done to document whether or not the problem has been taken care of.

Mike Earley asked if the department did anything between June 13, 1988 and February 24, 1989 as there was nothing listed on the litigation report.

Mark Landa, Legal Bureau, responded that there had been some discussions with a lawyer representing one of the parties during that time, and several letters were sent.

Rozanne King commented that it would be helpful when there is a gap in dates such as this to have an indication that discussions took place.

Mr. Landa displayed an overhead drawing showing the location of each business and the area of the tanks and contaminated soils. He noted that soil gas readings were taken at the site which showed 100% readings in the area of Larry's tanks on the northern part of the property. Also, there were 100% readings in the area of the pump island and on the western boundary of the property just north of the tanks from Beck's Contracting. He showed the area where soils were removed as deep as ten feet.

APPOINTMENT - LARRY MATHERN

Larry Mathern, owner of Larry's D-X, stated that he hired Harold Meyers of Midwest Liquids Systems to oversee and advise what needed to be done to correct the problem. Mr. Mathern related that Mr. Meyers tested for fuel next to where the tanks are located and there was very little of anything in it, so he recommended that excavation stop there. He stated that he did not feel gas from underneath the pump was the cause of gas in the sewer line. Mr. Mathern noted that he is closing his station at the end of the month as he is pretty well broke. He added that he has done as much as he can afford to clean up the contamination. Mr. Mathern displayed a letter from Harold Meyers stating that it was his opinion that the contamination came from the old tanks rather than from a release under the pumps.

Margaret Prah1 asked who the department has been dealing with on this case.

Mark Landa responded that dealings have been mostly with Mr. Mathern, then Mr. Walker, and least of all with Mr. Beck.

APPOINTMENT - JACK WALKER

Jack Walker, owner of Walker Oil Company, stated that when he first heard of this problem there was a leaky union under one of the pumps. He related that he retained Petroleum Equipment of Marion, Iowa and they ran a test on the tank, did the repairs, then submitted a report to DNR. The next day, the tanks on Mr. Beck's property were removed and a test culvert was put in. The culvert was pumped out a few times and it was discovered that gasoline continued to come into the culvert. Mr. Walker explained that he, Mr. Mathern and Mr. Beck each agreed to pay one-third to get the area cleaned up. He circulated photos showing where excavation took place and where fresh soil was put in to replace the contaminated soil. Mr. Walker stated that he is in the process of bankruptcy and he has no solution to working out the problem. He related that he does not have the funds to make the assessment that is being required by DNR.

Mr. Landa explained that the remedial action taken by Mr. Mather, Mr. Walker and Mr. Beck was not wrong, but they have yet to identify the extent of the contamination on the property and to the groundwater. He stated that a plan should have been submitted before any work was done, and the Administrative Order directs that a plan be submitted to the department.

Mr. Mathern pointed out the areas where Harold Meyer suggested they dig holes and related that Mr. Meyer did not advise them to send in samples. Mr. Walker stated that Mr. Meyer was not retained as a paid consultant, he was a friend who was helping out and was paid a small wage.

Mr. Walker stated that he owns the tanks north of Larry's D-X, but he was never informed that there was 100% contamination present.

Chairperson Mohr asked who did the testing of the area.

Mr. Landa stated that Steve Grigurich of the DNR did the testing, initial investigation, preparation of the inspection report and sent it in.

APPOINTMENT - RALPH BECK

Ralph Beck, owner of Beck Contracting stated that the excavation cost the three of them \$4,500. He noted that D-X owned the tanks and they were abandoned before he, Mr. Walker, or Mr. Mathern owned the properties. Mr. Beck stated that he feels that D-X should pay the related bills as they were the people who put the tanks in, filled them with gasoline, and later abandoned them.

Nancylee Siebenmann asked what the State's obligation or action would be if action is taken against the parties and no funds are available.

Mr. Landa stated that a precondition to qualify for LUST funds is that enforcement proceedings take place to the point where the parties just do not have the money. Verification of the parties' financial capabilities can take place through the referral process.

Margaret Prah1 asked what can be done to involve D-X in the matter.

Mr. Murphy stated that Mr. Walker raised the issue of D-X ownership after he received the letter notifying him of the referral. Mr. Walker indicated that he did not know a person from D-X that the department could contact because the company was taken over by Sunoco. Mr. Murphy added that the Attorney General can explore further responsibility in this case if it is referred.

Motion was made by Nancylee Siebenmann for referral to the Attorney General's Office. Seconded by Rozanne King. Motion carried unanimously.

Walterman Implement Company

Mr. Murphy stated that in April 1989, field office staff investigated this facility and discovered there was a 500 gallon underground storage tank for waste oil. Staff notified Leon Walterman that the tank would need to be registered and they followed up with a certified letter regarding same. The department has not received the registration forms and staff feels it could be an intentional failure to notify. Mr. Murphy explained regulations mandated in the the statute in regards to UST registration.

APPOINTMENT - TODD GEER

Todd Geer, Attorney representing Walterman Implement, addressed the Commission stating that there are questions regarding

ownership of the property. He explained that Irene Waltermann (Leon's mother) was the owner at the time the complaint was issued. Leon Waltermann was the president of the Corporation, and Irene Waltermann was the senior shareholder of the Corporation at that time. Mr. Geer related that Mr. Waltermann contacted him when he received the registration requirements for the underground storage tank. Since negotiations for real estate purchase of the property were taking place at that time, Mr. Geer advised Mr. Waltermann to wait until negotiations for property purchase were completed. Mr. Geer explained that way they could use the information from the Groundwater Hazards Form to complete the tank registration. Mr. Geer stated that negotiations broke down and it was put on the back burner. He related that this was not a knowing violation on Mrs. Waltermann's part, and it was not a violation by the corporation because the corporation was not the owner of the premises in question. In conclusion, Mr. Geer requested a deferral of this case since the Corporation now has acquired a legal interest in the property. He noted that the tank was registered as of today.

William Ehm pointed out that in the litigation report it states that 455B.473 requires owners or operators of such tanks to register them.

Motion was made by William Ehm for referral to the Attorney General's Office. Seconded by Mike Earley. Motion carried unanimously.

Siouxland Quality Meat Company

Mr. Murphy stated that this case involves violations of an Administrative Order which was issued primarily as a result of a direct discharge from the facility into the old Floyd River channel. He noted that Siouxland also had been consistently violating their loading limitations to the city, therefore, staff included in the Administrative Order a requirement that Siouxland comply with municipal loading limitations. Violations of the latter requirement continued. Mr. Murphy related that after this was put on the agenda for referral the company informed staff that they have negotiated a new agreement with the city for higher limitations. He added that even if the higher limitations were applied retroactively with the date of the Order, there would still have been violations. Mr. Murphy noted that the company was in compliance in December. Staff feels it should be referred for injunctive relief and appropriate civil penalty.

APPOINTMENT - KATHLEEN KRANTZ

Kathleen Krantz, General Manager of Siouxland Quality Meat Company, stated that Siouxland has suffered substantial incurrence of noncompliance due to miscommunication of the City

of Sioux City and Professional Services Group (PSG) in correspondence obtained for the files. She distributed a file showing letters, meetings, and good faith efforts by Siouxland to be in compliance with the permit levels and flow limits outlined in 87-08-Z, issued by the Utilities Department. Ms. Krantz stated that three different permit levels have been imposed on the company in a five month period and she expanded on same. She noted that the majority of violations as shown in Exhibit 1 have occurred on weekends, which is not a true reflection of accurate numbers for one day of their processing plant. She added that a total of all three days of loading to the sampler which would be for Friday, Saturday and Sunday, are considered under one day's permitted levels, and this causes a violation of the daily maximum level allowed. She explained the company's cooperative efforts with the City and PSG. Ms. Krantz stated that Siouxland has incurred major expenditures to comply with the city's request of a pretreatment system and flow metering. She added that the company has cooperated with testing by PSG. In conclusion, Ms. Krantz stated that she feels that Siouxland Quality Meat Company has been wrongfully charged in noncompliance and has made every effort to work with PSG and the City of Sioux City. She asked for the Commission's consideration after receiving the facts on this issue.

Nancylee Siebenmann asked what the violation record would be if the weekend numbers were removed.

Ms. Krantz responded that the violations would be less than one-half. She stated that a flow meter was installed in October so there would have been no way to measure the flow prior to that time. Before October the flow was estimated. She noted that in November the violations were substantially less.

Clark Yeager asked if the city has ever imposed a penalty on the company.

Ms. Krantz responded that the city imposed a surcharge of \$6,400 in November, 1989.

Motion was made by Mike Earley for referral to the Attorney General's Office. Seconded by Richard Hartsuck.

Clark Yeager asked if the referral to the Attorney General will be different than the litigation report.

Mr. Murhpy stated that all the new information that has been submitted will be included such as the reduced weekend violations and the new agreement negotiated with the city for higher limitations.

Motion carried unanimously.

APPOINTMENT - ALFRED BLACKMER, ISU (Nitrogen testing kit)

James Combs, Division Administrator, Coordination and Information Division, presented the following item.

Mr. Combs presented background information on Dr. Blackmer and then introduced him. Mr. Combs stated that he felt the Commission might be interested in a report from Dr. Blackmer on the soil nitrogen test kit he developed.

Alfred Blackmer, Professor of Agronomy at ISU, stated that he will cover a broad topic of nitrogen management using new tools such as soil tests and tissue tests to show what can be done, what is being found, and what is different about this newly developed soil test. He distributed a pamphlet entitled "Estimating Nitrogen Needs by Soil Testing." Dr. Blackmer explained that up until the past year, the recommendations for how much nitrogen fertilizer was put down was not based on a soil test (a general formula was used instead). In using the soil test kit, testing is done in late spring and allows for additional fertilizer to be added if needed, at a time when corn plants are 6 to 12 inches tall. The test reflects the amount of nitrogen that is lost during the spring, as well as showing nitrate that is formed from other matter. Recommendations are site-specific for each field, year, weather conditions, and exact management history of the field. The new test has some limitations in that when anhydrous ammonia is applied it stays right behind the nitrogen and it nitrifies and converts the nitrates much more slowly. The recommendation is that farmers do not use it where anhydrous is put down. Dr. Blackmer explained that the new testing kit allows on-farm analysis, and is inexpensive and simple to use. Dr. Blackmer pointed out that the kit is not necessary for this test, farmers can always send their samples to the laboratory and have it analyzed that way. Cost of the kit is \$85.00 if ordered before March 1, 1990, and \$125 if ordered after March 1, and contains enough for 50 soil samples. A refill kit is available for \$25.00 and contains enough for another 50 soil samples. Dr. Blackmer noted that approximately 800 kits have been sold since January when they went on the market, and response has been received from as far away as France. Dr. Blackmer presented details of how the test is done and results of same. One of the unique things is that it can characterize the degree of excess fertilizer being used. He stated that in these studies most of the tests showed that twice the amount of nitrogen was applied than what was needed. He noted that it will take a long time for the farmer to realize that more fertilizer is not going to help increase yields. Dr. Blackmer stated that because of the drought weather conditions, we are getting aprecedented accumulation of nitrate in the soil. Instead of it normally leaching out between seasons, it actually appears to be accumulating. He expanded on results of tests giving statistics of use and need. Dr. Blackmer stated that better nitrogen management should increase profitability for crop

February 1990

Environmental Protection Commission Minutes

producers, decrease contamination of groundwater, substitute service for excess fertilizer, and reduce nitrogen fertilizer use without reducing profitability.

NEXT MEETING DATES

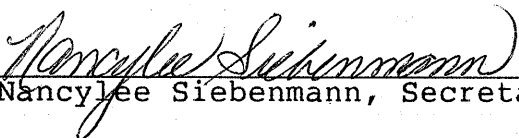
March 19-20, 1990

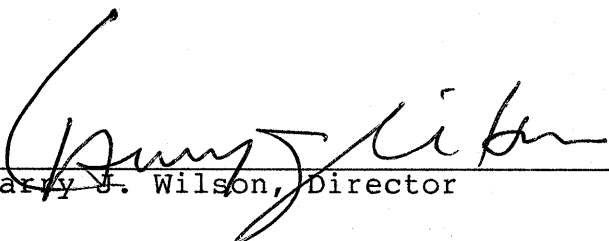
April 16-17, 1990

May 18-19, 1990

ADJOURNMENT

With no further business to come before the Environmental Protection Commission, Chairperson Mohr adjourned the meeting at 12:40 p.m., Tuesday, February 20, 1990.


Nancy Lee Siebenmann, Secretary


Larry S. Wilson, Director

INDEX

A

Adoption of Agenda E90Feb-1
Adoption of Minutes E90Feb-2
Air Program
 Computer and Equipment
 Acquisition E90Feb-4
Anderson, Henry
 Risk Assessment Study E90Feb-4
Appointment
 Alfred Blackmer, ISU E90Feb-147
 Chip Lowe (Fred Iben
 referral) E90Feb-138
 Fred Iben E90Feb-138
 Jack Walker E90Feb-143
 John Brown (City of
 Fairfield) E90Feb-140
 Kathleen Krantz (Siouxland
 Quality Meat Co.) E90Feb-145
 Larry Mathern E90Feb-142
 Ralph Beck E90Feb-144
 Todd Geer E90Feb-144

B

Balvanz, Don E90Feb-50
Beck, Ralph -
 Appointment E90Feb-144
Blackmer, Alfred -
 Appointment E90Feb-147
Briefing, On-Site Disposal of Farm
 Waste E90Feb-137
Brown, John -
 Appointment E90Feb-140

C

City of Fairfield
 Referrals To The Attorney
 General E90Feb-140
Clapp, Charles
 Contested Case Decision
 Appeal E90Feb-120
Composting
 Grants to Projects with
 Degradable Bags E90Feb-41

Computer and Equipment Acquisitions
 for Water and Air
 Programs E90Feb-4
Contested Case Decision,
 Appeal--Charles Clapp E90Feb-120
Contested Case Decision,
 Proposed--Craig Natvig E90Feb-119
Contested Case Decision,
 Proposed--East Side
 Acres E90Feb-119
Corrective Action Levels for
 Petroleum Contamination from UST
 Installations, Notice of Intended
 Action--Chapter 135 E90Feb-102

D

DeWitt Moose Lodge
 Referrals To The Attorney
 General E90Feb-122
Director's Report E90Feb-2
Don Carolan-Hanson Tire Service
 Referrals To The Attorney
 General E90Feb-121

E

East Side Acres
 Proposed Contested Case
 Decision E90Feb-119
Eure, John
 Risk Assessment Study E90Feb-3

F

Feasibility Study
 Improvements to the Public Water
 Supply System, Winterset,
 Iowa E90Feb-51
February 1990 COMMISSION
 MEETING E90Feb-1
Final Rule--Chapter 39, Requirements
 for Properly Plugging Abandoned
 Wells E90Feb-52
Financial Status Report E90Feb-7

G

Geer, Todd - Appointment E90Feb-144
Grants to Composting Projects with
Degradable Bags
City of Carroll E90Feb-41
City of Dubuque E90Feb-41
City of Grinnell E90Feb-41

H

Hallberg, Dr. George
Statewide Rural Well-Water
Survey E90Feb-2

I

Iben, Fred - Appointment E90Feb-138

K

Krantz, Kathleen -
Appointment E90Feb-145

L

Land Treatment Procedures for
Petroleum Contaminated Soils,
Notice of Intended Action--Chapter
121 Amendment E90Feb-111
Landfill Alternative Grant
Applications E90Feb-22
Legislation Update E90Feb-123
Lowe, Chip - Appointment E90Feb-138

M

Mathern-Beck-Walker
Referrals To The Attorney
General E90Feb-141
Mathern, Larry -
Appointment E90Feb-142
Members Present E90Feb-1
Monthly Reports E90Feb-13

N

National Emission Standard for Air
Pollutants, Asbestos Demolition &
Renovation, Notice of Intend
Action--Ch. 23 E90Feb-100
Natvig, Craig
Proposed Contested Case
Decision E90Feb-119
Next Meeting Dates E90Feb-148
Notice of Intended Action--Ch. 23,
National Emission Standard for Air
Pollutants, Asbestos Demolition &
Renovation E90Feb-100

P

Proposed Rule--Chapter 101 Revision,
General Requirements Relating to
Solid Waste Disposal E90Feb-33
Proposed Rule--Chapter 109
Amendment, Solid Waste Disposal
Fees E90Feb-115
Proposed Rule--Chapter 121
Amendment, Land Treatment
Procedures for Petroleum
Contaminated Soils E90Feb-111
Proposed Rule--Chapters 40, 41, and
43, Public Water Supply Monitoring
and Surface Water Filtration and
Disinfectant E90Feb-74
Public Participation
Don Balvanz E90Feb-50
Public Water Supply Monitoring and
Surface Water Filtration and
Disinfectant, Proposed
Rule--Chapters 40, 41, and
43 E90Feb-74

R

Recess E90Feb-137
Referrals To The Attorney General
City of Fairfield E90Feb-140
Darlo Schaap E90Feb-122
DeWitt Moose Lodge E90Feb-122
Don Carolan-Hanson Tire
Service E90Feb-121
Mathern-Beck-Walker E90Feb-141
Timber Lake Estates E90Feb-122
Van Diest Supply
Company E90Feb-122
Walterman Implement
Company E90Feb-144

Requirements for Properly Plugging
Abandoned Wells, Final
Rule--Chapter 39 E90Feb-52
Risk Assessment Study
Henry Anderson E90Feb-4
Henry Anderson, Wisconsin Dept.
of Public Health E90Feb-3
John Eure E90Feb-3
John Eure, Iowa Dept. of Public
Health E90Feb-3

S

Schaap, Darlo
Referrals To The Attorney
General E90Feb-122
Solid Waste Disposal
General Requirements, Proposed
Rule--Chapter 101
Revision E90Feb-33
Solid Waste Disposal Fees, Proposed
Rule--Chapter 109
Amendment E90Feb-115
Soo Line Referral E90Feb-121
Statewide Rural Well-Water
Survey E90Feb-2

T

Timber Lake Estates
Referrals To The Attorney
General E90Feb-122

U

Underground Storage Tanks
Corrective Action Levels for
Petroleum Contamination from
Installation (Chapter
135) E90Feb-102
Update - Don Ervin E90Feb-137

V

Van Diest Supply Company
Referrals To The Attorney
General E90Feb-122

W

Walker, Jack -
Appointment E90Feb-143
Walterman Implement Company
Referrals To The Attorney
General E90Feb-144
Water Programs
Computer and Equipment
Acquisition E90Feb-4
Winterset, Iowa
Feasibility Study for
Improvements to the Public Water
Supply System E90Feb-51

Y

Yanacek, Ted E90Feb-136